# KV-20/13VM30/31 RM-Y138/W

# SERVICE MANUAL



# US Model

KV-20VM30

chassis No. SCC- J90A-A

KV-13VM30

chassis No. SCC- J90B-A

KV-13VM31

chassis No. SCC- J90C-A

# Canadian Model

KV-20VM30

chassis No. SCC-J89A-A

KV-13VM30

chassis No. SCC-J89B-A

### MODELS OF THE SAME SERIES

KV-13VM30/31

48 x 72 mm

50 Hz-20kHz

120V AC, 60Hz

13V; 15" x 16" x 151/5"

20V, 201/2" x 201/2" x 183/5" 522 x 522 x 474 mm

86W (KV-13VM30/31)

Approx. 4min 30sec (T-120 Tape)

108W (KV-20VM30)

382 x 407 x 411 mm

13V, Net 13 76kg (33 3lbs) Gross. 15.62Kg (34.4lbs)

20V, Net: 26.1 kg (58 lbs) Gross: 30 Kg (66.1 lbs)

with 1 AA size (R6) battery Antenna Adapter (1)

Supplied accessories Remote Commander RM-Y138/W (1)

KV-20VM30

#### **SPECIFICATIONS**

Speaker Size

response

Audio frequency

Power requirements

Power consumption

Fast-forward and

rewind time

**Dimensions** 

(w/h/d)

Weight

American TV standard, NTSC COLOR Television system

VHF: 2-13 Channel coverage

UHF: 14-69 **CABLE TV: 1-125** 

Trinitron® Tube Picture tube

20-inch picture measured diagonally 21-inch picture tube measured diagonally 13-inch picture measured diagonally 14-inch picture tube measured diagonally

75Ω external antenna terminal for Antenna

VHF/UHF

Video In(phono jack) Input

2 each (Front/Rear): 1 Vp-p, 75-ohms

unbalanced negative sync Audio In(phono jack)

2 each (Front/Rear): 400 mVrms (100%

modulation) Impedance. 47 kΩ

Headphone Jack Output

Tape Speed SP: 33.35 mm/sec.

EP. 11.12 mm/sec.

Recording/playback 8 hours in EP mode

Maximum

Design and specifications are subject to change without notice





#### TABLE OF CONTENTS

Secti	ion Title	Page	Secti	ion	Title	Page
1. GI	ENERAL	4	3. SE	ET-UP	ADJUSTMENTS	35
1-1.	Locating the Controls	4	3-1.	Beam	Landing	35
1-2.	Connecting TV Antenna/Cable	5	3-2.		ergence	
1-3.	Using the ON-Screen Menus		3-3.	Focus	Adjustment	38
1-4.	Turning the cable Mode ON or OFF	6	3-4.	(Scree	en)G2 and White Balance Adjustments	3 38
1-5.	Presetting TV channels	7	3-5.	White	Balance Adjustments	38
1-6.	Conncting other Equipments	9				
1-7.	Watching TV Programs		4. S/	AFETY	RELATED ADJUSTMENTS	39
1-8.	Using Convenient Features	10				
1-9.	Adjusting Picture Quality		5. CI	IRCUIT	ADJUSTMENTS	40
	Using Closed Caption					
	Using Noise Reduction Function		6. V	CR AD	JUSTMENTS	42
	. Using the Timer-Activated Functions					
	. Using the the Play On Functions		7. TE	ROUBL	ESHOOTING CHARTS	43
	. Playing Back A Video Tape					
	. Recording TV programs				MS	
	. Index Function				Diagram	
1-17	. Troubleshooting	29	8-2.	Circuit I	Boards Location and Printed Wiring Bo	oards 5
					nductors	
	ISASSEMBLY		8-4.	Schema	atic Diagrams and Printed Wiring Boar	rds 5
2-1.						
2-2.	Chassis Assy Removal		9. M	<b>IECHA</b> I	NISM DISASSEMBLY	6 <sup>.</sup>
2-3.	Picture Tube Removal					
2-4.	Wire Dressing		10. ľ	MECHA	ANISM ADJUSTMENT	70
2-5.	Circuit Boards Arrangement					
2-6.	Top Case & Housing Assy Disassembly		11. E	EXPLO	DED VIEWS	9
2-7.	Service Position					
2-8.	Deck & RP Board Diassembly		12. E	ELECT	RICAL PARTS LIST	9
2-0	MA Board Diascombly	33				

# g ...... 35 and White Balance Adjustments ...... 38 e Adjustments ...... 38 TED ADJUSTMENTS ...... 39 ISTMENTS ......40 MENTS ..... 42 OTING CHARTS ......43 .....52 ..... 52 Location and Printed Wiring Boards ...... 53 rs...... 54 grams and Printed Wiring Boards ...... 55 DISASSEMBLY .....61 ADJUSTMENT ..... 78 IEWS......92 PARTS LIST ......97

Title

Page

#### (CAUTION)

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE

#### WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, DUE TO LIVE CHASSIS THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

#### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND A MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFEOPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED

#### (ATTENTION)

ARRES AVOIR DECONECTE LE CAP DE L'ANODE, COURT CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE

#### ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHEÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DÉPANNAGE

LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ Á L'ALIMENTATION SECTEUR.

#### ATTENTION AUX COMPOSANTS RELATIFS ALA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE △ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ

#### SAFETY CHECK-OUT

(US Model only)

After correcting the original service problem, perform the following safety checks before relasing the set to the customer

- Check the area of your repair for unsoldered or poorly soldered connections Check the entire board surface for solder splashes and bridges.
- 2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
- Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
- 4 Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair Point them out to the customer and recommned their replacement
- 5 Look for parts which, though functioning, show obvious signs of deterioration Point them out to the customer and recommend their replacement
- Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer
- Check the condition of the monopole antenna (if any).
   Make sure the end is not broken off and has the plastic cap on it.
  - Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
- Check the B+ and HV to see they are at the values specified.Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV
- Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage Check leakage as described below

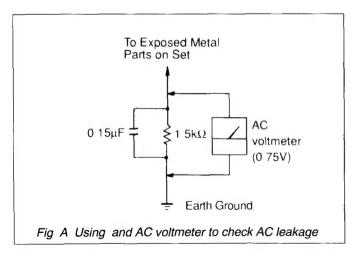
#### **LEAKAGE TEST**

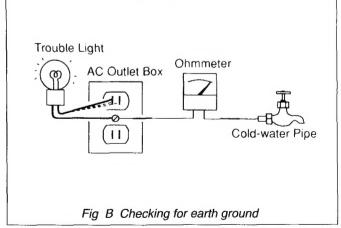
The AC leakage from any exposed metal parts to earth ground and from all exposed metal parts to any exposed metal parts having a return to chassis, must not exceed 0.5 mA(500 microampers) Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers instructions to use these instruments
- A battery-operated AC milliammeter The Data Precision 245 digital multimeter is suitable for this job
- 3. Measuring the voltage drop across a resistory by means of a VOM or battery-operated AC voltmeter The "limit" indication is 0 75V, so analog meters must have an accurate low-voltage scale The Simpson 250 and Sanwa SH-63TRD are examples of a passive VOM that is suitable Nearly all battery operated digital multimeters that have a 2V AC range are suitable (See Fig. A)

#### **HOW TO FIND A GOOD EARTH GROUND**

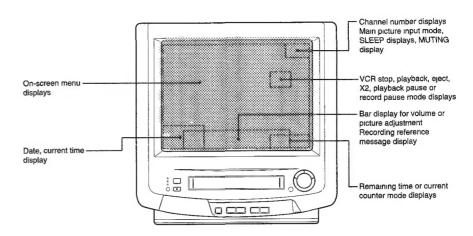
A cold-water pipe is guaranteed earth ground, the cover plate retaining screw on most AC outlet boxes is also at earth ground If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a coldwater pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60-100 watts trouble light (not a neon lamp) between the hot side of the line, the lamp shojuld light at normal brilliance if the screw is a ground potential (See Fig. B)





QUICK TIMER REC button



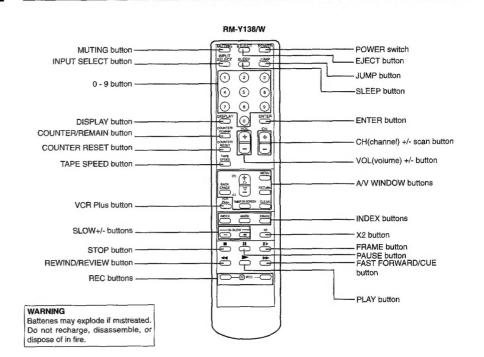


#### LOCATING THE CONTROLS

OT

# Rear and Front Panel Front Door Inside IN FROM ANT.





Remote Commander

Although you can use either an indoor or outdoor antenna with the VIDEO TV, an outdoor antenna will provide you with better picture quality. You can receive cable TV by connecting a cable supplied by your local cable company.

#### Connecting VHF, UHF or VHF/UHF Combination Antenna, or CATV Cable

#### 75-ohm coaxial cable (round)

 Check your antenna cable type and prepare the end of the cable using the F-type connector.

Attach an F-type connector (not supplied).



7mm(1/4inch) 10mm(3/8inch) F-type connecto







6

Plug the connector into the VHF/UHF terminal at the rear of the VIDEO TV.



Most combination antennas are equipped with a signal splitter.
Remove the splitter and attach the appropriate

#### 300-ohm twin-lead cable (flat)

Check your antenna cable type and prepare the end of the cable using the 300-ohm twin-lead cable.

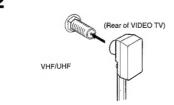
Attach the supplied antenna connector.



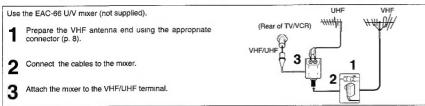
Loosen both screws on the connector with screwdriver.

> Attach the cable and tighten both screws with a screwdriver.

Plug the connector into the VHF/UHF terminal at the rear of the VIDEO TV.



# connector. Connecting Both VHF and UHF Antennas



#### When the U/V mixer is used

Snow and noise may appear in the pictures when viewing cable TV channels over 37 (W + 1).

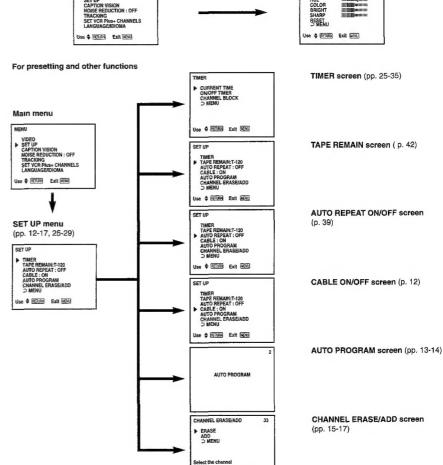
Note

For better picture quality, we would recommend you to connect an outdoor antenna.

#### 1-3. USING THE ON-SCREEN MENUS

The following flow chart shows the different levels of on-screen menus that you can use to make various adjustments and settings. See the indicated pages for instructions on using each feature.





Use \$ RETURN Exit NOV



8

Preface

#### **USING THE ON-SCREEN MENUS**

#### For closed caption setting **CAPTION VISION menu** Main menu CAPTION VISION screen (p. 23) CAPTION VISION VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR Plus+ CHANNELS LANGUAGE/IDIOMA @/TEXT OFF Ø2 TEXT1 TEXT2 → MENU Use \$ RETURN Exit WEND Use \$ FETURN Exit WEAU For noise reduction function NOISE REDUCTION menu Main menu NOISE REDUCTION screen (p. 24) VIDEO SET UP CAPTION VISION NOISE REDUCTION: ON TRACKING SET VCR PIUSE CHANNELS LANGUAGERDIOMA VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR Plusa- CHANNELS LANGUAGE/IDIOMA Use \$ RETURN Exit MEMU Use \$ RETURN Exit WENU For tracking adjustment function TRACKING menu Main menu TRACKING screen (p. 41) MENU TRACKING VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING AUTO : ON TRACKING ADJUST SET VCR PIUS+ CHANNELS Use CRETURN Exit MENU Use \$ RETURN Exit WENT For VCR Plus+ CHANNELS setting SET VCR Plus+ CHANNELS menu Main menu SET VCR Plus+ CHANNELS screen SET VCR Plus+ CHANNELS (p. 44-46) VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR PIUSE CHANNELS LANGUAGE/DIOMA GUIDE CH TV CH Push 0 - 9 keys to set Or. Push RETURN to see Use \$ RETURN Exit WEND VCR Plus+ CHANNEL LIST For on screen language selection function LANGUAGE SELECTION menu Main menu To select the LANGUAGE/IDIOMA MENU LANGUAGE VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR Plus+ CHANNELS LANGUAGE/IDIOMA ENGLISH ESPAÑOL MENU Press △ + or ▽ - to select the desired language mode. And, press RETURN.

#### Navigating Through the Menus

Use the buttons on the remote commander.

Press MENU.

To return to the normal screen Press MENU on the Remote Commander.

To return to the previous menu Press △+ or ▽- to select MENU.

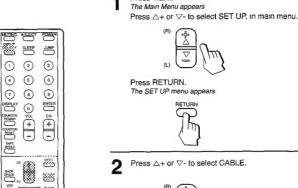
Use \$ RETURN Exit WEND

Then press RETURN. To return to the main menu Repeat the above, until you reach the main menu.

not press a button within 60 seconds.

11 12 Preface

#### 1-4. TURNING THE CABLE MODE ON OR OFF



TIMER
TAPE REMAIN:7-120
AUTO REPEAT : OFF
CABLE : ON
AUTO PROGRAM
CHANNEL ERASE/ADD
D MENU Use \$ RETURN Exit WENU Press RETURN.

If you have cable connected to your VIDEO TV (p. 8-9) follow the steps below to turn

the cable connection on or off. CABLE is preset to OFF when you use your VIDEO

VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR PIUS+ CHANNELS
LANGUAGE/IDIOMA

Use \$ FETURA Exit HEN

TV for the first time. Turn CABLE to OFF to preset or watch VHF or UHF channels.





If the VIDEO TV is in LINE mode, you cannot select CABLE. Repeatedly press INPUT SELECT to change to TV mode.

All of the controls are on the Remote Commander.

0

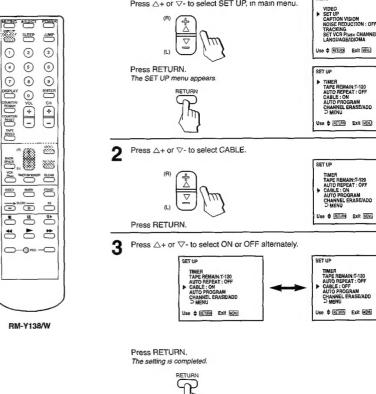
0

10

OISPLAY

COUNTER, REMAIN COUNTER RESET TAPE SPEED

SPACE



Preface

To return to the normal screen

 $\sim$ 

Use \$ RETURN Exit WEND

To display the main menu

The menus disappear automatically if you do

**"" " "** 

SELECT SLEEP JUMP

1 2 3

( 5 G

7 0 0

Perform auto programming during the day rather than late at night, when some channels may not be broadcasting.

Press POWER on the VIDEO TV or the Remote Commander to turn the VIDEO TV on.



Using the Menu, select cable off to receive VHF/UHF channel. Select cable on to receive cable stations.

(Follow the steps in "Turning the Cable Mode On or Off", p. 12.)



VIDEO SET UP CAPTION VISION NOISE REDUCTION : OFF Tracking Set vor Plus+ Channels Use \$ SETURA Exit WHILE

Press △+ or ▽- to select SET UP.



VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR PIUS+ CHANNELS
LANGUAGE/DIDMA se \$ RETURN Exit (COL)

\*\* SEF 8W 1 2 (3) **(4)** 6 7 8 9 COUNTERN REMAIN RESERVE SPEED () ≥ (+ 1) ENTER ) § ( MENU BACK SPACE OF SEASON SEEDS OF SEASON SEEDS OF SEASON SEASON SEASON SEASON SEASON SEEDS OF SEASON SEEDS OF SEASON S MOEX MARK ERASE (E) (E) (E) • -**\*** • • \_\_\_\_\_\_

RM-Y138/W

Receivable channels for this TV VHF: 2-13 UHF: 14-69

Cable: 1-125

To select TV channels without presetting Press 0-9.

To return to the normal screen Press MENU.

To erase unnecessary channels, or to add channels that could not be preset automatically because their signal was too weak, follow the steps in "Erasing Unnecessary Channels CHANNEL ERASE" and "Presetting Only Desired Channels-CHANNEL ADD" (pp. 15-17).

Press RETURN. The SET UP menu appears.



SET UP

TIMER
TAPE REMAIN:T-120
AUTO REPEAT: OFF
CABLE: ON
AUTO PROGRAM
CHANNEL ERASE/ADD
DMENU

Use & RETURN Exit WEND

If the VIDEO TV is in LINE mode, you cannot select AUTO PROGRAM. Press INPUT SELECT to change to TV mode.

Press △+ or ▽- to select AUTO PROGRAM.



TIMER
TAPE REMAIN:T-120
AUTO REPEAT: OFF
CABLE: ON
AUTO PROGRAM
CHANNEL ERASE/ADD
DMENU Use & RETURN Exit WEND

SET UP

Press RETURN.



AUTO PROGRAM

"AUTO PROGRAM" appears on the screen and receivable channels (other than the channels already preset) are preset in numerical sequence. The channels previously preset will not remain in the TV's memory.

When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

DISPLAY

SOLUTION

SOLUTION

SOLUTION

TAKE

T  $\infty$ AFTURNO CLUA HOSE SPASE **∂**\*\*\*\* **Ö** \* 5 5 

RM-Y138/W

Press the CH +/- button to select the channel you want to erase. For example, to erase channel 8, press CH + or - until 8 appears.





Press MENU. The main menu appears.

> Press RETURN. The SET UP menu appears.



Use & RETURN Exit WEND

Press △+ or ▽- to select SET UP



VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Pluse CHANNELS
LANGUAGE/IDIOMA Use \$ STUM Exit UNU

SET UP TIMER
TAPE REMAIN:T-120
AUTO REPEAT: OFF
CABLE: ON
AUTO PROGRAM
CHANNEL ERASE/ADD
DIMEN!! lae \$ PETURA Exit WENT

RM-Y138/W

① 2 3

4 (5) 6

0 (3) (9)

DISPOSITION OF THE PARTY OF THE 008(-1) 

<u>ش</u>

MOSEX MARK

å **. 5 5 5** 

VER THERE OF SOME CLEAR 8

ERASE

×2 

RM-Y138/W

SLEEP

3

(6)

9 ENTER

0 0

**(4) (5)** 

ODJATEN YOL SEAT I APRED I APR

SAACE SOME THE PROPERTY CLEAR

= \$5.0₩ = ~

-

\* \* \*

PREG --

NDEX LUAN

Press △+ or ▽- to select CHANNEL ERASE/ADD.



SET UP Use \$ RETURN Exit (JEM) To return to the normal screen Press MENU.

Press RETURN.

The CHANNEL ERASE/ADD screen appears, and the cursor points to ERASE.



CHANNEL ERASE/ADD Select the channel
Use \$ RETURN Exit NEW

Note

If the VIDEO TV is in LINE mode, you cannot select CHANNEL ERASE/ADD. Press INPUT SELECT to change to TV mode.

Press RETURN.

A "-" sign appears in front of the channel number display showing that the channel is erased from the channel scan memory.



CHANNEL ERASE/ADD Select the channel
Use & RETURN Exit WEND

Press MENU.



The next time you press the CH +/- buttons, channel 8 will be skipped.

To erase other channels

Repeat steps 1-6.

15

Preface

16

Preface

9

SLEEP JUMP

\*

83

(3) (3)

MCK SPACII VCR Photo-TMERONISCEN CLEAR

<u>..</u> 0

RM-Y138/W

MOSEX COMPANY

Ē SLOW ∓

3

(3) (3) (8)

⊗ \* (\*)

3

COUNTERV RESET TAPE ) ⊗ ∮ 1 1 88

10

Use this feature to add channels one at a time to the channel scan memory.

Press 0-9 to select the channel you want to add. For example, to add channel 25, Press 2, 5 and ENTER.

> 0 2 0 ① ⑤ ⑥ **⑦ ⑥** 9 DISPLAY (o) ENTER



(Follow steps 2-4 in "Erasing Unnecessary Channels-CHANNEL ERASE," pp. 15-16)

If the TV is in LINE mode, you cannot select CHANNEL ERASE/ADD. Press INPUT SELECT to change to TV mode.

5 Press △+ or ▽- to select ADD.





A "+" sign appears in front of the channel number display showing that the channel is added to the channel scan memory.





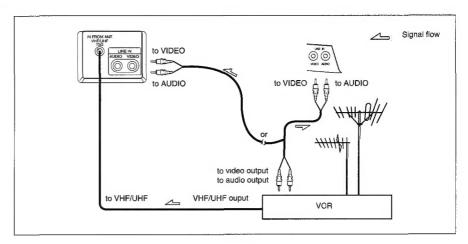
To return to the normal screen

Press MENU.

Press MENU.

To add other channels

Repeat steps 1-6.



- Remove the antenna cable from the VIDEO TV Antenna terminal. Connect the antenna cable to the antenna terminal of the other Video/Audio source (ex. Video recorder). Then connect a coaxial cable from the VHF output terminal back to the antenna terminal of the VIDEO TV.
- To use your VIDEO TV to monitor an audio/video source (such as another VCR, a Camcorder or a Laser Disc Player), connect the audio/video source output jacks to the AUDIO/VIDEO IN jacks on the rear panel or front door of the VIDEO TV.

Then select LINE IN using the PLAY ON on the front

- . Press PLAY ON on the front door of the VIDEO TV so that
- LINE<sup>o</sup>tappears on the screen.
- To return to TV mode, repeatedly press INPUT SELECT on the VIDEO TV or on the Remote Commander so that a channel number appears on the screen.
- · For operating instructions, refer to the instruction manual furnished with the VCR.
- . If the picture or sound is affected, move the VCR away from the VIDEO TV.

17

#### 1-7. WATCHING TV PROGRAMS

#### 1-8. USING CONVENIENT FEATURES



S/EEb

(2) (8)

HOEK MARK ERASE

E T

RM-Y138/W

<u>.</u>

THEROHEDINE CABAR

(8) 8 (8)

3 8

COUNTER REMAIN COUNTER REMAIN TAPE ⊗⊗⊗⊗ 333

JUMP

RETURN

<2°

Press POWER on the VIDEO TV or the Remote Commander to turn the TV on.



Turn the cable mode on or off to select the type of channel you want to watch, VHF/UHF or cable TV. (Follow the steps in "Turning the Cable Mode On or Off," p.12.)

If "LINE" is displayed on the screen, press INPUT SELECT on the Remote Commander so that the channel number appears.

Select a channel in one of the following two ways:

To scan the preset channels\* in numerical sequence Press CH +/-







For more information on presetting channels, see pp. 13-17.

To select a channel directly

Press 0-9.

For example, to select channel 14, press 1 and 4.

You don't have to press ENTER after having pressed the desired channel number. The channel is directly selected if you do not press ENTER after

But press ENTER to select a channel quickly.



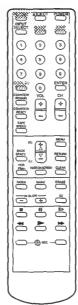
Press VOL +/- to adjust the volume.

Press VOL + to increase the volume. Press VOL - to decrease the volume.



To turn off the TV

Press POWER on the TV or the Remote Commander again.



RM-Y138/W

#### Muting the Sound - MUTING

Press MUTING.

The display "MUTING" will appear on the screen.

To restore the sound Press MUTING again.



#### Keeping the Displays On-Screen - DISPLAY

If AUTO CLOCK has been set when you turn the VIDEO TV on, the display will appear for about 3 seconds as shown right.



To display the channel

Press DISPLAY.

All the existing displays appear: channel number, date, time, VCR operating mode and tape counter.

To cancel the display

Press DISPLAY again. The display will disappear



#### Setting the Sleep Timer - SLEEP ---

The sleep timer turns off the TV automatically after the amount of time you select.

Each time you press SLEEP, the time increments 30, 60, 90 and OFF mode appear in sequence.



 SLEEP (	OFF
 SLEEP	30
 SLEEP	60
SLEEP	90

The SLEEP display appears about one minute before the TV turns off.

To cancel the setting

Press SLEEP untill OFF mode appears.

The "SLEEP OFF" display appears for about three seconds.

Turn the TV off. The sleep timer setting is cancelled.

Switching Quickly Between Two Channels - JUMP

Press JUMP once to recall the channel you were watching previously. Press JUMP again to switch back. Use this feature to keep track of two programs alternately.



19 Preface Preface

RM-Y138/W

12

You can adjust the picture for each input mode (TV mode, LINE) by pressing INPUT SELECT to select the input mode before making the adjustments.

These adjustments are retained in memory even when you turn off the TV until you change the adjustments again.

Press MENU.

The main menu appears, and the cursor points to VIDEO.



VIDEO
SET UP
CAPTION VISION
MOISE REDUCTION: OFF
TRACKING
SET VCR PIUS+ CHANNELS
LANGUAGE/IDDOMA Use \$ RETURN Exit MERG

Press RETURN. The VIDEO menu appears.



HUE COLOR BRIGHT SHARP RESET DMENU Use & RETURN Exit MENU

Press △+ or ▽- to select the item you want to adjust. For example, to adjust the picture color, select COLOR.





Press RETURN. The adjustment bar appears.





Press △+ or ▽- to make the adjustment.





Increase color intensity





Decrease color intensity

Press RETURN. The new setting appears in the VIDEO menu.





To adjust other items Repeat steps 3-4.

	Press 17 - to	Press 25 9 to 1
PICTURE	decrease picture contrast with soft color	increase picture contrast with vivid color
HUE	make skin tones become purplish	make skin tones become greenish
COLOR	decrease color intensity	increase color intensity
BRIGHT	darken the picture	brighten the picture
SHARP	soften the picture	sharpen the picture

To return to the normal screen Press MENU.

To restore the factory (mid-level) setting Go to the VIDEO menu and select RESET by pressing △+ or ▽- Then press RETURN. All the settings except for PICTURE will be restored to mid-level settings.

SLEEP JUMP

] \$\frac{1}{2}\$

MENU

2 3

NOT THE TOTAL STATE OF THE TOTAL

0 0 0

5 5

**○**-@≈-○

RM-Y138/W

0 (5) (6)

0 (8) (9)

COUNTERVE RESET SPEED ( ) p ( ) ENTER

21 22 Preface Preface

SLEEP JUMP

6

) \* ( ) ·

① 3 (3)

0 (8) 9

OSSPLAY
COLUMNOS
RESIGNATION
COLUMNOS
RESIGNATION
TAPE
SEED 0 50 EMTER

(4) (5)

**88** 

SACK STORES CALL

<u>.....</u>

**3** € 6

-

5 5 5

**○**--@\*\*---

RM-Y138/W

NDEX MARK

**6** €

**\* \* \*** 

—®≈ –

8

RETURN

Press MENU. The main menu appears VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Plus+ CHANNELS Use ♦ RETURN Exit MENU

Press △+ or ▽- to select CAPTION VISION. Then press RETURN. The CAPTION VISION screen appears.







Press △+ or ▽- to select closed caption mode.

Select CC1 or CC2 to view Captions. A Caption is a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.)



Select TEXT1 or TEXT2 to view Text. Text is information that is presented using the full to full television screen. It is usually not related to the program.



Select CC/TEXT OFF if you do not want to use the CAPTION VISION mode.

CAPTION VISION OMENTO OFF Use & STORM Eath (STORM)

Press RETURN. The Setting is completed.

Note

Captions may appear with m white box or another error instead of a certain word. Poor reception of TV programs can also cause errors in Closed Caption.

You can reduce the picture noise on the screen in VCR playback mode.

Press MENU. The main menu appears, and the cursor points to VIDEO.



TRACKING SET VCR PIUS+ CHANNELS LANGUAGE/IDIOMA Use \$ RETURN Exit NEW

Press △+ or ▽- to select NOISE REDUCTION.



MENU VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING SET VCR PIUS+ CHANNELS LANGUAGE/DIOMA Jee \$ BETURN Exit WOW

Press RETURN, then △+ or ▽- to select ON.





VIDEO SET UP CAPTION VISION NOISE REDUCTION : ON TRACKING BET VCR Plus+ CHANNELS Use \$ RETURN Exit WEND

Press RETURN. The picture noise is reduced.



23

Preface

24

Preface

#### SLEEP ;UIII F 10 2 3 4 (5) (6) 0 (8) (0) DISPLAY ENTER 0 COLVER REMAIN ) (+) + $\Box$ , 🖁 **600**3 SPACE 288 THETONECIEDY CLEAR NDEX MARK ERASE CX2 Œ <u>.</u> **\* >** \*

#### RM-Y138/W

#### Notes

- · The clock cannot be set automatically if you don't receive a channel that carnes a time signal in your area. If so, set the clock manually (pp28-29).
- · If there are only a few channels in your area that carry time signals, setting the clock automatically may take up to about 30 minutes. If nothing happens even after you wait about 30 minutes, set the clock manually
- . The menu disappears automatically if you don't proceed for more than one minute.

#### Setting the Clock - AUTO CLOCK SET

Before you use the timer feature for recording program, you need to set the current time and date.

Some TV and cable channels have started to transmit time signals with their broadcasts. Your VIDEO TV can pick up this time signal to automatically set the clock. After completing the steps below, when you turn off the VIDEO TV, it will automatically search for a channel that cames a time signal and set the clock. The Auto Clock Set feature only works if a channel in your area is broadcasting a time signal. If broadcasters in your area are not yet sending time signals, set the time manually (PP28 - 29). Clock setting is necessarry also to use ON/OFF TIMER, CHANNEL BLOCK, Timer Recording and VCR Plus Recording.

Press MENU. VIDEO
SET UP
CAPTION VISION
NOISE REDUCTION: OFF
TRACKING
SET VCR Plus- CHANNELS The main menu appears Use & RETURN Exit MOV

In main menu, press △+ or ▽- to select SET UP Then press RETURN. The SET UP screen appears





TIMER
TAPE REMAIN:T-120
AUTO REPEAT: OFF
CABLE: OFF
AUTO PROGRAM Use \$ RETURN Exit MEMB

Press △+ or ▽- to select TIMER. Press RETURN. The TIMER screen appears.







Press △+ or ▽- to select CURRENT TIME. Press RETURN. The CURRENT TIME screen appears.

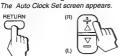






Press RETURN then select AUTO by using △+ or ▽-Press RETURN again.





FULL AUTO OPTIONS Use \$ RETURN Exit MENU

JUMP SLEEP

ENTER

\*

8

200

**a \* \* \*** 

TIMEROHSOREIN CLEAR

Ğ Đ

MARK ERASE

RM-Y138/W

1 (2) (3)

(4) (5) (8)

0 (8) (9)

COUNTER RESET TANK SPEED

SPACE

₫,

( ) VOL



Press RETURN then select FULL AUTO by using △+ or ▽-

When clock data service is available, the clock is set automatically with leaving the TV off

To activate the Auto Clock Set function, turn the TV off.

The VIDEO TV automatically sets the clock.

The VIDEO TV automatically searches for a channel that carries a time signal and sets your time zone and daylight saving time (if applicable). If your clock sets, but displays the wrong time zone or daylight saving time, you can adjust these settings by following the steps below.

#### If the clock is not activated

Press RETURN again.

Follow steps 1 to 5 above.

Press RETURN then select OPTIONS by using △+ or ▽-Press RETURN again.

The CURRENT TIME SET CH screen appears.





CURRENT TIME SET CH MANUAL [CH---]

Press RETURN, then press △+ or ▽- to select AUTO or MANUAL.

#### II you select AUTO:

The VIDEO TV automatically searches for a channel that carries a time signal.

If you select MANUAL.

Set a channel that carries a time signal using the number buttons. Use this option if you know that channel. Most PBS member stations broadcast a time signal. For the fastest response, set the VIDEO TV to your local PBS station.

CURRENT TIME SET CH AUTO MANUAL [CH---]

Lise & RETURN Exit MENU

Use & RETURN Exit NEW

CURRENT TIME SET CH M AUTO MANUAL

Push 0-9 keys to set CURRENT TIME for clock Then push RETURN

Use \$ ROOM Exit WENU

26

Preface

25

Preface

#### **USING THE TIMER-ACTIVATED FUNCTIONS**

Press RETURN.

The YOUR TIME ZONE AND DAYLIGHT SAVING TIME screen appears.



Use \$ FETURA Exit (IEEE)

Press RETURN, then press △+ or ▽- to select AUTO or MANUAL.

If you select AUTO:

The VIDEO TV automatically sets your time zone and daylight saving time (if applicable).

ATLANTIC EASTERN CENTRAL MOUNTAIN PACIFIC ALASKA HAWAH Use \$ RETURN Exit (VENU)

YOUR TIME ZONE

If you select MANUAL.

- 1. Press RETURN, then set the time zone of your area using △+ or ▽-
- 2. Press RETURN, then select STANDARD TIME or DAYLIGHT SAVING TIME using △+ or ▽-

DAYLIGHT SAVING TIME

STANDARD TIME DAYLIGHT SAVING TIME

Use \$ FETURE Exit WEND

6

15

Press RETURN.



To activate the Auto Clock Set function, turn the TV off.

#### Notes

- . If AUTO CLOCK has been set when you turn the VIDEO TV on, the display will appear as shown right. When the display does not appear as shown right even though AUTO CLOCK has been set: using the Manual Clock Set stops the automatic channel search when your set is power off. If the Auto Clock Set feature is not in use, the channel search is not performed when your set is power off.
- . If you set the clock manually, the display will appear as shown right.



12:00 AM 3/11 FRI

- · Select STANDARD, if the DAYLIGHT SAVING TIME is not performed in your
- · When you connect another VCR to the VHF/UHF antenna terminal, if VCR's tape is transmitted wrong time signal, your VIDEO TV automatically sets the clock by the time signal of the tape.

Not to set the clock by the time signal of

Turn your VIDEO TV off after having tunned VCR off or Set the clock manually on your VIDEO TV.



RM-Y138/W

To change or correct the setting before completing it

Press BACK SPACE to return to the item to be erased.

#### Setting the Clock - MANUAL CLOCK SET --

Set the time to 11:30AM, Sunday on the 25th of February, 1996.

In main menu, press △+ or ▽- to select SET UP Then press RETURN. The SET UP screen appears.

Press △+ or ▽- to select TIMER. Press RETURN. The TIMER screen appears.

Press △+ or ♡- to select CURRENT TIME. Press RETURN. The CURRENT TIME screen appears.

Press RETURN then select MANUAL by using △+ or ▽-Press RETURN.

The Manual Clock Set screen appears.



CURRENT TIME -/-/-- ---Use & RETURN Exit WENT

Press RETURN. ""Set the month" appears on the screen. The month will appear in red.



CURRENT TIME Use \$ RETURN Exit WEND

Press △+ or ▽- to set the month. Each time you press △+ or ▽- the month changes in sequence



CURRENT TIME

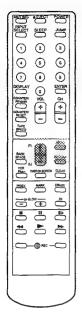
Use ♦ िहासि Exit M90

27

Preface

Preface

28



RM-Y138/W

To display the time Press DISPLAY.

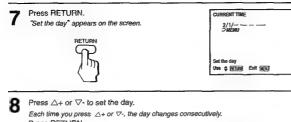
To return to the normal screen Press MENU.

#### Notes

 The internal clock of this VIDEO TV operates on a 12-hour cycle.

> 12:00 AM stands for midnight. 12:00 PM stands for noon.

- All the settings including CLOCK will be erased if you unplug the VIDEO TV or a power failure occurs. Reset the current time by following steps 1-11.
- You cannot change the clock during Timer Recording. To change the clock, stop the recording.



9 Press △+ or ▽- to set the year.

Each time you press △+ or ▽-, the year changes in sequence and the day of the week automatically changes.

Press RETURN.

"Set the time" appears on the screen.

2/25/96 SUN 12:00AM ⊃MENU Set the time Use ♦ (क्टाक) Exit (set)

1 ∩ Press △+ or ▽- to set the hour.

Each time you press △+ or ▽-, the hour changes in sequence starting with "12:00AM."

Press RETURN

CURRENT TIME

2/25/96 SUN 11:00 AM

3 MENU

Set the time
Use \$ (\$3.00) Exit (\$3.00)

Press △+ or ▽- to set the minute.

Each time you press △+ or ▽-, the minute changes in sequence.

Press RETURN.

The setting is completed and the clock starts.

CURRIENT TIME

▶ 2/25/96 SUN 11:00AM

→ MENU

USO © SETURN ENT SEME



RM-Y138/W

#### Setting the ON/OFF TIMER

With this function you can set your favorite program to appear on the screen at the time that you set

**EXAMPLE:** Set the timer to turn on the VIDEO TV every Monday through Friday at 3:15 PM for 2 hours, on channel 21.

In main menu, press △+ or ▽- to select SET UP
Then press RETURN.
The SET UP screen appears.

Press △+ or ▽- to select TIMER.
Press RETURN.
The TIMER screen appears.



Press △+ or ▽- to select ON/OFF TIMER.
Press RETURN.

The ON/OFF TIMER screen appears.



EVERY SUN-SAT 12:00AM -h CH---PMENU

ON/OFF TIMER

Use & RETURN Exit UENT

If the ON/OFF TIMER display does not function, the current time has not been set and you cannot select ON/OFF TIMER. To set the clock, see "Settling the Clock-AUTO CLOCK SET/MANUAL CLOCK SET." PP 25-29.

⚠ Press RETURN.

Note

""Set the day" appears on the screen.
"EVERY SUN-SAT" will be changed in red.



ON/OFF TIMER

EVERY SUN-SAT
12:00AM -h CH-

Set the day
Use \$ TETURY Exit NEW

30

#### **USING THE TIMER-ACTIVATED FUNCTIONS**

SLEEP JUIII 0 0 0 66 3 (1) (9) 0×1-1 ENTER BONTER BELLEN ₹**♦** 8 SACK SPACE 888 YCA THERONOREDY CLEAN MARK ERASE Ě \* **\*** \* 

RM-Y138/W

Press △+ or ▽- to set the day. Each time you press △+ or ▽-, the days of the week change as shown in Fig. 1 (page 32).

Then press RETURN.

"Set the time" appears on the screen.





OWDER TIMES EVERY MON-FRI 12:00AM -II CH--Set the time
Use \$ \$\int\text{EDRY}\$ Exit \$\int\text{EDRY}\$

Press  $\triangle$ + or  $\nabla$ - to set the hour that you want the TIMER to start. Each time you press  $\triangle$ + or  $\nabla$ -, the hour changes in sequence.

Then press RETURN.







Press △+ or ▽- to set the minutes. Each time you press △+ or ▽-, the minutes change in sequence.

Then press RETURN.

"Set the duration" appears on the screen.





ON/OFF TIMES EVERY MON-FRI 3:15PM 1h CH-Set the duration
Use \$ ETUN Exit PSW

Press △+ or ▽- to set the duration of time. Each time you press  $\triangle$ + or  $\nabla$ -, the duration changes from "1" to "9" in sequence.

Then press RETURN.

"Select the channel" appears on the screen.







Press △+ or ▽- to set the channel that you want the TV to tune in. Each time you press △+ or ∇-, the channel number changes in sequence.



Select the channe Use \$ STURN Exit WHI

Press RETURN. The setting is completed.



ON/OFF TIMES EVERY MON-FRI 3:15PM 2h CH21 DMENU Use \$ RETURN Exit WELL

Selecting the day(s) of the week When you press A+, the days of the week appear in the following order.

· One minute before the timer goes off, the

· If you have not set the clock correctly, the

"TV will turn off" will appear on the

ON/OFF TIMER will not operate at the

proper time. To set the clock, see "Setting the Clock-AUTO CLOCK SET/MANUAL

All the settings including ON/OFF TIMER

will be erased if you unplug the VIDEO TV

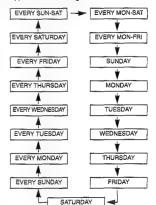
or a power failure occurs. Reset the

CLOCK SET," pp 25-29.

TIMER by following steps 1-9.

Notes

screen.



(♥ -: reverse order)

#### Cancelling the ON/OFF TIMER

Select the ON/OFF TIMER screen (Refer to pp. 30 - 32). Press RETURN.

"EVERY SUN-SAT" will appear in red.

Press BACK SPACE to erase the ON/OFF TIMER.



ON/OFF TIMER Use \$ RETURN Exit WON

#### To Change or Correct Setting the ON/OFF TIMER

Before completing it

Press BACK SPACE to return to the item to be changed or corrected. When It is displayed in red, set it again by using the △+ or ▽-

After completing II

Select the ON/OFF TIMER screen.

Then, press RETURN to return to the item to be changed or corrected.

When it is displayed in red, set it again by using the △+ or ▽-

Preface

31

Preface

Note

To return to the normal screen Press MENU.

SLEEP JUMP

(6)

1 2 3

4 6

THE CHIEFE CLA

NOMEX WAR EPARK

**□**\*\*\*• **□** 

RM-Y138/W

<u></u>

0 0 0

DISPLAY CONTERV RESET

SPEED SPEED

18

Then press RETURN.
The SET UP screen appears.

Press △+ or ▽- to select TIMER.
Press RETURN.

The TIMER screen appears.







Press △+ or ▽- to select CHANNEL BLOCK.
Then press RETURN.
The CHANNEL BLOCK screen appears.

"Select a program" appears on the screen.





CHANNEL BLOCK

I EVERY SUM-SAT
12:00AM -h CH-2EVERY SUM-SAT
12:00AM -h CH-DMENU
Select a program
Use \$ \$ \ \ext{EQD} \ \ext{Ext} \ \ext{EQD}

Press RETURN again.
"Set the day" appears on the screen.



CHANNEL BLOCK

1EVERY SUN-SAT
12:00AM -h CH-2EVERY SUN-SAT
12:00AM -h CH-DMENU

Set the day
Use \$ EXTER EXIT LERE



RM-Y138/W

Fress △+ or ▽- to set the day.

Each time you press  $\triangle$ + or  $\nabla$ -, the days of the week change as shown in Fig. 1 (page 32).

Then press RETURN.

"Set the time" appears on the screen.





CHANNEL BLOCK

1EVERY MON-FRI
12:00AM -h CH-

Set the time Use \$ RETURN Exit (NEND)

6 Press △+ or ▽- to set the hour that you want to start blocking time.

Each time you press △+ or ▽-, the hour changes in sequence.

Then press RETURN.





CHANNEL BLOCK

1EVERY MON-FRI
3:00PM -h CH--
2EVERY SUN-SAT
12:00PM -h CH--
DMENU

Set the time
Use \$ FITCH Exit WENT

Press △+ or ▽- to set the minutes.
Each time you press △+ or ▽-, the minutes change in sequence.

Then press RETURN.

"Set the duration" appears on the screen.





CHANNEL BLOCK 1EVERY MON-FRI 3:15PM 1h CH-

2EVERY SUN-SAT 12:00AM -h CH— D MENU

Set the duration
Use \$ RETURN Exit WEND

Press △+ or ▽- to set the duration of time.

Each time you press △+ or ▽-, the duration changes from "1" to "12" in sequence.

Then press RETURN.

"Select the channel" appears on the screen.





CHANNEL BLOCK

1EVERY MON-FRI
3:15PM 2h CH2EVERY SUN-SAT
12:00AM -h CH-DMENU
Select the channel
Use \$ [BEDB] Exit WERD

, 00

Preface

Preface

33

34

19

Each time you press △+ or ♡-, the channel number changes in sequence.



Press RETURN. The setting is completed.



CHANNEL BLOCK 1EVERY MON-FRI 3:15PM 2h CH21 2EVERY SUN-SAT 12:00AM -h CH-

CHANNEL BLOCK

1EVERY MON-FRI 3:15PM 2h CH21

2EVERY SUN-SAT 12:00AM -h CH-

Select the channel
Use \$ RETURN Exit MENU

Notes

Set," pp 25-29.

the sound is muted.

Note

Press MENU.

To return to the normal screen

block is being activated.

If you have not set the clock correctly, the

CHANNEL BLOCK will not operate at the

proper time. To set the clock, see "Setting

the Clock-Auto Clock Set/Manual Clock

· All the settings including CHANNEL

BLOCK will be erased if you unplug the

VIDEO TV or a power failure occurs. Reset the TIMER by following steps 1-9.

appears and the picture is blocked and

· Recording is possible while the channel

If the CHANNEL BLOCK and ON/OFF

TIMER settings are overlapped, only the

CHANNEL BLOCK function operates.

· If you select the blocked channel during the time you set, the message BLOCKED

se \$ RETURN Exit WEND

10 To set another program, repeat steps 1 to 3, press △+ or ▽- to select the next channel block and repeat steps 4 to 9.

#### Cancelling the CHANNEL BLOCK

Select the CHANNEL BLOCK screen. (Refer to page 33.) Press RETURN. EVERY SUN-SAT will appear in red.

Press BACK SPACE to erase the CHANNEL BLOCK.



CHANNEL BLOCK 1EVERY SUN-SAT 12:00AM -h CH-

Select a program
Use \$ SETIAN Exit MON

#### To Change or Correct Setting the CHANNEL BLOCK

#### Before completing it

Press BACK SPACE to return to the item to be changed or corrected. When it is displayed in red, set it again by using the  $\triangle$ + or  $\nabla$ -

#### After completing it

Select the CHANNEL BLOCK screen.

Then, press RETURN to return to the item to be changed or corrected.

When it is displayed in red, set it again by using the △+ or ▽-

### 1-13. USING THE PLAY ON FUNCTIONS

You can use PLAY ON on your VIDEO TV to monitor quickly other Video/Audio sources (such as a camcorder, a video game, etc).

Connect an AV cable(Video camera, Game machine, etc) to LINE IN tacks on the front door or rear panel of your VIDEO TV.

Press the PLAY ON(Green Color button) inside the front door. "LINE" appears on the screen.

Although your VIDEO TV is in TV mode or VCR play back mode, it turns to LINE IN mode directly by pressing PLAY ON.

When you press PLAY ON during the TV or VCR playback mode Your VIDEO TV turns to LINE in mode.

To return to TV mode during play on mode Press INPUT SELECT or CH +/-

When you press PLAY ON twice during power on VIDEO TV turns off.

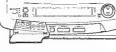
#### When you press PLAY ON during power off

Your VIDEO TV turns on and turns to LINE IN mode directly. When you press this button again, your VIDEO TV will be turned off.

When you press PLAY ON during recording or LINE in mode, The PLAY ON button does not operate.

#### Notes

- . When the LINE IN jacks inside the front door and on the rear panel are connected to external equipment at the same time, the LINE IN jacks inside the front door are prior to them on the rear panel.
- . If you press INPUT SELECT or CH+/- while your VIDEO TV is in play on mode by pressing PLAY ON, the VIDEO TV will be not turned off by pressing this button again. To turn it off, press POWER.



SLEEP JUMP 1 (2) (3) (4) (5) (6) 7 (8) 9 COUNTER RESULTS
COUNTER RESULTS
TAPE
SPEED ENTER 0 \* MEHU RETURN MERCH SORESH CLEAR HIGGEX MARKS **5** € -

RM-Y138/W

36

Preface

Preface

35

3

9

·

(5) 6

8

ENTER DE

MENU

BACK PACE VCA AETURN
VCA CLUSTER CLEAR

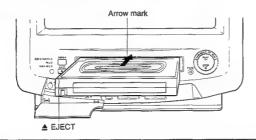
INDEX WARK ERASE

**5**\*\*\***5 5** 

**\* \* \*** 

DISPLAY
DISPLAY
COUNTERV
REMAIN
COUNTERV
RESELT
SPEED
FARE

Inserting a Video Cassette



Gently press the center of the front side of the cassette until the mechanism draws it into the compartment.

When the cassette has been inserted, the oo / STAND BY indicator lights and the VIDEO TV turns on automatically.

Note

When you insert a cassette without a safety tab, playback starts automatically (AUTO PLAYBACK function).

Ejecting the cassette

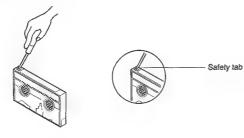
Press EJECT ▲.

You can also eject the cassette when the power is off.

Protecting your cassette against accidental erasure

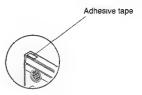
The cassette is provided with a safety tab to protect against accidental recording. Break off the safety tab with a screwdriver or other suitable tool.

If the safety tab is removed, the cassette will be ejected when you try to record on the cassette.



RM-Y138/W

To record on a cassette with the safety tab broken off, simply cover the tab hole with adhesive tape.



#### Maximum recording time of a tape

The quality of tape you use greatly affects record/playback quality and the life of the VIDEO TV. Use only cassette tapes that have the official VHS logo.

High-grade tapes give the best results, especially at the EP speed. They also have a better oxide coating that helps prevent dirty video heads. Although T-160 tapes offer the longest recording time, they contain thinner tape that is more likely to stretch or cause tape jams. We suggest that you use T-120 or shorter tapes.

Recording in the SP or EP mode is possible with this unit. When recording, select the desired recording mode (SP or EP) with TAPE SPEED on the Commander. During playback, the unit automatically detects the recording format, and then plays back the tape in the appropriate mode.

The following chart shows the maximum recording times for T-60, T-120 and T-160 tapes at the recording speeds as below.

Speed	T-60	T-120	T-160
SP	1 Hour	2 Hours	2 2/3 Hours
	(60 Minutes)	(120 Minutes)	(160 Minutes)
EP	3 Hours	6 Hours	8 Hours
	(180 Minutes)	(360 Minutes)	(480 Minutes)

Playing back a video tape in the LP mode is possible but recording in this mode is not possible with this unit.

20

37

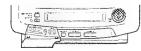
Preface

Preface

38

SP 0:00:00

#### **PLAYING BACK A VIDEO TAPE**



SEEP JUMP

⊙§(**♦**) ENTER

MDEX MARK ERASE

**3** 3 3

O-®≈≈ -O

& &

. .

\* **\*** \(\frac{1}{2}\) PACE PRETURN CHANGE CHA

① (2) (3)

(4) (5) (6)

0 (3) (9)

COUNTER/ REMAN COUNTER/ REMAN TAPE SPEED

#### Playing Back a Prerecorded Cassette Tape

Insert a prerecorded cassette into the tape compartment. The VIDEO TV automatically turns on.

#### Note

When playing back rental tapes, select NOISE REDUCTION:ON in main menu image detail

If playback does not start, press PLAY ▶ The tape plays back at the speed at which was recorded.

#### To stop playback

Press STOP ■.

#### To stop playback for a moment Press PAUSE III.

III appears on the screen and image will stop on the screen

To resume playback, press PAUSE ■ or PLAY ▶

appears on the screen.

#### When the tape is played back to the end

The tape is automatically rewound to the beginning (auto rewind). The power remains on.



In the main menu, press △+ or ▽- to select SET UP during playback or stop mode and then press RETURN. And press △+ or ▽- to select AUTO REPEAT and then press RETURN. By using △+ or ▽-, select AUTO REPEAT to ON.

#### Variable Speed Playback

You can enjoy playing back pictures in variable speeds on the VCR.

#### Still Picture

During playback mode, press PAUSE ■ To resume normal playback, press PLAY or PAUSE II.

#### Notes

- . No sound accompanies the picture, which may be unstable or have video "noise" in it. This is normal.
- . If the VCR is left in the pause mode for more than about 5 minutes, the VIDEO TV will be in playback mode automatically.







#### To see a slow motion (Slow Picture)

Press -SLOW+ during playing back.

#### To advance the picture frame by frame (Frame Picture)

Press FRAME III during Still Picture.

#### To advance the tape rapidly

While the tape is being played back, pressing FAST FORWARD ▶ will move the tape forward at high speed so you can see the picture and choose where to stop. When you do this, [▶▶] appears on the screen.

If you release the button, the VCR will return to normal playback.

When tape is not being played back and the VCR is in the stop mode, pressing FAST FORWARD→ winds the tape forward at very high speed without displaying the picture

When you do this, >> appears on the screen.

You can stop the forward running of the tape at any time by pressing STOP ■.

If during the operation, the tape rewinds forward to the end, the machine will automatically stop and then rewind the tape back to the beginning again.

By pressing X2, you can now run through a tape at twice normal speed to find the exact place you want. Revert to normal speed by pressing PLAY▶

#### To rewind the tape rapidly

play the tape backwards to find a particular spot. When you do this, [◄◄] appears on the screen and the tape will be rewound at very high speed.

At the end, STOP appears on the screen and invite you to press PLAY

#### Viewing TV Programs During Tape Playback

While a tape is being played, you can switch to watching TV broadcasts. Press STOP ■.

The VIDEO TV returns to normal TV reception mode.

RM-Y138/W

39

Preface

10

Preface

#### SLEEP JUMP 0 2 3 **4 5** 6 0 (8) (9) E C DIBPLAY ( **♦ (** • 8 \*\* TAPE SPEED \* SPACE 288 Phila, TIMER CH SCREEN CLEAR MARK <u>~</u> ⊕ <u>"</u> ٠

#### RM-Y138/W

#### Playing Back a Tape Recorded on Another VCR

When playing back a tape recorded on another VCR, there might be some picture noise.

Tracking ensures that the tape is correctly aligned with the playback head. It only works in the "playback" mode and its principle purpose is to minimize picture shake and what is called "noise" (fuzzy lines across the picture during playback and still picture).

It is adjusted either automatically or manually.

#### Automatic tracking adjustment function

When playback starts, the auto tracking automatically adjusts the picture. "AUTO TRACKING" flashes for 5 seconds.

The automatic tracking control is activated in the following conditions:

- . When the cassette is inserted for the first time.
- When the recording mode on the playback tape is switched from SP to EP and back again.
- . When the picture is distorted by scratches on the tape.
- When TRACKING AUTO:ON is selected in the Tracking menu after the picture is adjusted automatically.

If auto tracking does not work, the tracking was probably last adjusted manually.

#### Adjusting the tracking manually during playback

When the playback picture proves to have streaks or snow during normal playback, Still picture or Slow picture, adjust the picture manually using the Tracking menu. Press either  $\triangle$ + or  $\nabla$ - to select TRACKING ADJUST in Tracking menu to obtain the best possible picture. Press RETURN and adjust by pressing  $\triangle$ + or  $\nabla$ - When playing back a tape recorded on another VCR, the tracking condition is automatically adjusted on this VCR.

#### Notes

- Auto tracking adjustment may be impossible when the recording condition of the tape is poor.
- During auto tracking adjustment, streaks or noise may appear.

#### Using COUNTER/REMAIN

To display the counter, press COUNTER /REMAIN once

The tape counter shows the tape travel time in hours, minutes and seconds during recording or playback.

SP 0:00:00

\_\_\_\_

To see the remaining tape time during recording or playback, press COUNTER/REMAIN twice.

The remaining tape time appears with "REM."

REM 1:36

#### **Using Counter Memory Function**

The counter memory makes it easy to return to a particular spot on the tape after recording or playback. The tape stops when the counter reaches SP 0:00:00. This feature is especially helpful when editing a recording.

Press COUNTER/REMAIN to see the counter.

Start recording or playback, and press COUNTER RESET at the point you want to return to. The counter displays SP 0:00:00.

SP 0:00:00

Press STOP • when you finish recording or playing the tape.

4 Press REWIND/REVIEW ← ...
The tape stops at SP 0:00:00.

Press PLAY ▶ to play the tape.

42

41

Preface

Preface

1

Note

check the tape mode.

OTHERS appears.

For seeing the remaining tape time, first

If you want to see the remaining tape time in

T-120, press RETURN then △+ or ▽- until

T-120 appears in TAPE REMAIN screen.

For OTHERS, press the button until

SLEEP JUMP

(3)

\*

J

\*\*\*

1 2

**⊙** § **⊕** ENTER

THE OF SOME CLEAR

PROSEX MAARK ERASSE

<u></u> **\*** 

RM-Y138/W

0 (5) (6)

0 0 (9)

DISPLAY
COUNTERV
REMARK
COUNTERV
AGSET
TAPE
SOYEGO

SPACE ,(8) 883

(3) (8)

(8) (%)

WUTTING & ELECT POWE

SLEEP JUMP

**=** \$ €

**♣ ★** 

(I)

#### **Recording TV Programs**

#### Caution

Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws. Also, use of this recorder with cable television transmission and/or program owner.

Insert a cassette with the safety tab. The VIDEO TV turns on automatically (Auto power on).

Select the recording tape speed, SP or EP, with TAPE SPEED.

Select the channel to be recorded with CHANNEL +/- or 0-9 buttons.

Press the two REC buttons on the Commander at the same time, or the REC button on the unit. The REC indicator lights

#### To stop recording

Press STOP ...

#### Temporarily to stop recording at a particular point

Press PAUSE II to eliminate unwanted station breaks or program material while recording a TV program.

REC [ appears on the screen.

To resume recording, press PAUSE 11 again.

When the recording pause mode lasts for more than approximately 5 minutes, the unit enters the stop mode.

#### Note

#### When the tane reaches its end

The tape rewinds to the beginning. The power will remain on.

#### Recording a Program Without Watching the TV

Turn off the power of the TV.

There will be no interference with the recording.

You cannot watch another program while recording one program.

#### RECORDING TV PROGRAMS USING VCR PLUS +

VCR Plus+ is a feature in SONY VCRs that simplifies the task of programming the VIDEO TV to make timer recordings.

#### How VCR Plus+ works

Whenever you want to record a TV program, all you need to do is look up the program's "PlusCode," 

number assigned to each program that's published in the TV section of most newspapers, cable TV listings, and even TV GUIDE magagine. Then, just enter the PlusCode of the program you want and the VIDEO TV is automatically programmed to record that show. It's that simple. With VCR Plus+, you no longer have to go through a lengthy and often repetitive procedure when you set start and stop times, channel numbers, and dates. All this information is automatically sent to your VIDEO TV when you enter the program's PlusCode.

#### Setting Up VCR Plus +

Setting up your VIDEO TV involves coordinating the TV channel number(the number you turn to on your set to watch a program) with the guide channel number (the number that's assigned to that channel in your program guide). To get the guide channel numbers, find the "Channel Line-up Chart" in the program guide for your area that features VCR PlusCodes. It usually looks like the example on page 45.

For each channel your VIDEO TV receives, use the Channel Line-up Chart to check that the channel numbers match. For example, if HBO is listed in the Channel Lineup Chart on channel 33, and your VIDEO TV receives HBO on channel 15, you need to coordinate these numbers using the following procedure. For channels in which the numbers are the same (for example, if your VIDEO TV recevies HBO on channel 33, and the guide channel number is 33), you can skip this procedure.

In main menu, press △+ or ▽- to select SET VCR Plus+ CHANNELS.



MENU VIDEO SET UP CAPTION VISION NOISE REDUCTION: OFF TRACKING Use & RETURN Exit (VENU

Press RETURN The SET VCR Plus+ Channels screen appears and the GUIDE CH is highlighted.



SET VCR Plus+ CHANNELS GUIDE CH TV CH Push 0 - 9 keys to set Program GUIDE CH Or Push RETURN to see VCR Plus+ CHANNEL LIST

43

Preface

44

Preface

#### SETTING UP VCR PLUS +

Press 0-9 to enter the channel number assigned in the program guide and press ENTER. The TV CH is highlighted. SET VCR Plus+ CHANNELS GUIDE CH TV CH (1) (2) (3) - 25 **(** 6 Push 0 - 9 keys to set

Press 0-9 to enter the actual number on your VIDEO TV channel.

1 2 3 **①** (5) 6 7 0 8 ENTER

7 3 •

SET VCR Plus+ CHANNELS GUIDE CH TV CH Push 0 - 9 keys to set program GUIDE CH Or Push RETURN to see VCR Plus+ CHANNEL LIST

your TV CH

Then push ENTER

SET VCR Plus+ CHANNELS GUIDE CH TV CH 25 - 10 Push 0 - 9 keys to set your TV CH Or Push RETURN to see VCR Plus+ CHANNEL LIST

Repeat steps 3-4 for each channel whose numbers don't match.

When you have set all channels, press RETURN to confirm your channel 6 settings.



VCR Plus+ CHANNEL LIST GUIDE TV 33 - 18 59 - 3 61 - 47 77 - 35 90 - 8 Use to change page Push MENU to Exit

### Example of "PlusCode"



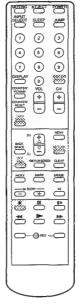
Example of "Channel Line-up Chart"

	_	
CABLE CH	CABLE TV	VCR Plus+ GUIDE CH
16	AMG American Movie Classics	35
17	Brave (program grid only)	54
20	CNN Cable News Network	42
21	GSP C-SPAN	28
22	OIS The Disney Change	17 #9
25	DSC The Discovery Charmel	<b>5</b> 87
34	ESN ESPN	17 34
35	FAM The Family Channel	47
5	HBO Home Box Office	33
27	Lifetime (	46
29	MAX Cinemen	45
30	Music Television	48
31	NIK Nickelostylan	38
38	SC Spelrs-Gharmel	59
39	SCA Sports Chagnel America	70
45	SHO Showtime	41
17	TBS TBS SuperStation	43
44	TMC The Movie Channel	58
49	TNN The Nashville Network	49
50	Tumer Network Television	52
51	USA Network	44

#### Note

To return to the normal screen. Press MENU.

# **RECORDING TV PROGRAMS USING VCR PLUS +**



#### RM-Y138/W

#### Before you start

- · Check that the clock is set correctly.
- . Insert a tape with its safetly tab in place. Make sure the tape is longer than the total recording time.
- . Turn on your VIDEO TV. When using a cable box turn it on.

#### Notes

- · You cannot set VCR Plus+ in the following cases:
- When the VIDEO TV is turned off.
- . The timer will not accept setting in the following cases: When you select Daily for a Saturday and
- Sunday program. When you select Daily or Weekly for a program more than seven days ahead. When you enter the PlusCode of a program that has already ended.
- . If the 

  programs have already been preset, "6 PROGRAMS HAVE ALREADY BEEN SET" appears on the screen.

#### Recording TV Programs

You can preset up to six programs within a one month time frame.

Press VCR Plus+

1/6 SAT TAPE SPEED [AT] Enter Program's PlusCode using 0-9 keys

Press 0-9 to enter the Plus Code of the program you want to preset. If you've made a mistake, press CLEAR and enter

the PlusCode again. (1) (2) (3) **(4) (5) (6)** 



1/6 SAT TAPE SPEED [26854-1 After entering PlusCode, pusj RETURN If you make a mistake, push CLEAR

Press TAPE SPEED to select the tape speed, SP, EP or AT.



1/6 SAT TAPE SPEED [26854---] Enter Program's PlusCode using 0-9 keys To change tape speed push TAPE SPEED

TAPE SPEED

PłusCode

[26854 ] [EP] RECORDING TIME

Press RETURN.

① **①** 9

OISPLAY (O) ENTER

The recording information appears on the screen. Check that the information is correct. If it is not, press CLEAR to cancel.

To preset another timer setting, repeat steps 1 to 4.

#### Notes

. When you press TIMER ON SCREEN after having checked the recording information, the TIMER SET/ CHECK menu appears with the recording information

DATE START STOP CH 1/25THU 4:30PM 6:00PM 03EP of program presetting using VCR Plus+.

To set timer, push POWER To cancel, Push CLEAR · Once, Daily or Weekly Setting

Press RETURN to return curser to the item presetting in TIMER SET/CHECK menu (Then refer to the step 3 on page 48 and Daily/Weekly Recording on page 49.).

Press POWER to turn off the VIDEO TV. The TIMER REC indicator lights up and the VIDEO TV stands by for recording. When using a cable box, leave it on. The VIDEO TV automatically turns on, records the program and turns off.

To stop recording while recording - Press STOP = To use the VIDEO TV before recording begins

Press POWER to turn on the VIDEO TV. The TIMER REC indicator goes off and the VIDEO TV is ready for use. After using the VIDEO TV, turn it off again to turn on the TIMER REC indicator. When using a cable box, leave it on. Remember to reset the VIDEO TV to stand by for recording before the time you've set the VIDEO TV to start recording, or the timer setting will be cancelled.

24

45

46

MUTHOR RETER POWER

SELECT SLEEP JUMP

© § (\* I

(\*) **(**\frac{1}{2} MENU

~~~

(a) \*\*\*\* a

**\* \* \*** 

RM-Y138/W

MDEX MARK

3

(B)

9

ENTER

) ₹ (+ |

286

1 2

**(4) (5)** 

0 0

DISPLAY

COUNTER

- TAN

Before you begin, check the following points.

- . The date and clock must be set correctly. (See "Setting the Clock -AUTO/MANUAL CLOCK SET" on pp. 25-29.)
- · Make sure that the cassette tape is long enough to record all the programs.
- . Make sure that the safety tab on the cassette is not broken off.

#### Recording from today to one month later

If today is August 31st, you can set the timer to record a program broadcast between today and September 30 (for 31 days). If today is January 31st, you can set the timer to record a program broadcast between today and February 28th (for 29days). A leap year is automatically considered.

Press TIMER ON SCREEN. The TIMER SET/CHECK screen appears.





RM-Y138/W

Setting the Timer

Example: Suppose you want to record a program broadcast on channel 26 from 9:00 PM on Wednesday January 10 in EP mode. Note that 12:00 AM is midnight and 12:00 PM is noon.





Press RETURN.

Make sure that today's date changes in red.

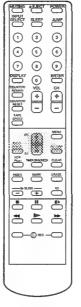
If not, reset the correct time. See "Setting the Clock - AUTO/MANUAL CLOCK SET" on pp. 25-29.





Note

During timer recording, [670] / STAND BY indicator lights



Press △+ or ♥- to set the month and date to 1/10 WED. The day of the week is automatically set.



Use \$ RETURN Exit WEND

Press RETURN to change the hours section under "START" in red then △+ or ∇- until 9 PM appears.



TIMER SET/CHECK 1/6 SAT
DATE START STOP CH
1/10WED 9: -PM Use \$ RETURN Exit DEM

Press RETURN to change the minute section under "START" in red then △+ or ∇-until 00 appears.







Press RETURN.

The hours section under "STOP" changes in red. Set the turn-off time referring to steps 4 and 5.



TIMER SET/CHECK 1/8 SAT DATE START STOP CH 1/10MED 9:00PM 10:55PM -Use & RETURN Exit (VENU)

Press RETURN to change the CH position in red then △+ or ▽-until 26





TIMER SET/CHECK 1/6 SAT
DATE STARTT STOP CH
1/10NED 9:00Pm 10:55PH 25 Use & RETURN Exit WEND

Preface

47

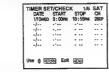
48

Preface



until EP appears.





#### Note

The AT (AUTO SPEED) mode starts recording at the SP speed, but if it determines there isn't enough tape left to complete the programmed recording, it switches to the EP speed.

Press RETURN to store the setting.



| ٠ | DATE<br>1/10weD | START<br>9:00PM | STOP<br>10:55PM | 2  |
|---|-----------------|-----------------|-----------------|----|
|   | -/              |                 | ****            | ** |
|   | -/              |                 | -:              | ** |
|   | -/              | -***            | ****            | -  |
|   | ./              |                 | ****            | -  |
|   | -/              |                 |                 |    |

10 After you finish programming, press POWER to turn off the VIDEO TV. The TIMER REC indicator lights.

To change or correct the setting before completing it Press BACK SPACE to return to the item to be changed.

#### To preset another program

Move the cursor to the second line after step ■ and repeat steps 2 to 10.

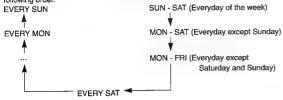
#### Daily/Weekly Recording

You can preset the timer-activated recording to the same program everyday of the week (Daily recording), or one day of the week(Weekly recording).

Follow steps 1 through 2 in "Setting the Timer" on page 47.

You can select the following programs.

Each time you press  $\nabla$ -, the indication under "DATE" on screen changes in the following order.



#### Notes

The following messages under each case appear on the screen:

 "PLEASE PUT IN A RECORDABLE CASSETTE" ---



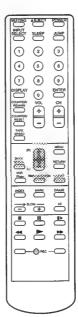
When switched to stand-by mode for timer recording, if a cassette is not inserted or a cassette without safety tab is inserted.

 "PLEASE PUSH POWER OFF TO SET TIMER"---

When the VIDEO TV is still turned on before the timer recording starts or when SLEEP OFF time and TIMER REC START overlap.

- "PLEASE STOP THE TAPE"—
  When TIMER ON SCREEN is pressed at
  the same time the tape is being played
  hark
- "VCR IS RECORDING"-- When PLAY, FAST FORWARD, REWIND REVIEW, EJECT, CH +/-, 0~9 buttons, INPUT SELECT, JUMP or MENU is pressed at the same time the timer recording is being done.
- "TIMER REC STARTS IN 5 MINUTES" -- 5 minutes before timer recording starts.
- "PLEASE SET THE CLOCK FIRST" --When TIMER ON SCREEN is pressed in
  the condition the current time is not set.
- "VCR is TIMER RECORDING"—
   When STOP button is pressed during recording.
   The recording is not stopped.
- To stop the Timer Recording
   1. Press TIMER ON SCREEN
- TIMER SET/CHECK screen appears.

  2. Press △+ or ▽- to select TIMER REC
- 2. Press △+ or ∨- to select TIMER REC PROGRAM. 3. Press CLEAR
- The program is cleared and the timer recording stops.



RM-Y138/W

#### When Preset Timer Recordings Overlap

#### If the turn-on time of two programs are the same

The program listed first on the TIMER SET/CHECK display has priority over the other programs. The timer recording of lower priority programs will be done from the point after program 1 is finished.

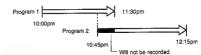


If the recording start time of program  ${\bf Z}$  is the same as the recording end time of program 1



# If the recording start time of program 2 comes before recording of program 1 is over

The recording of program 2 will begin after program 1 is finished.



#### Note

#### If a power interruption occurs

- If a power interruption lasting less than approximately three hours occurs while the VCR is waiting for the preset time, the VIDEO TV re-enter the timer recording standby mode.
- If a power interruption lasting more than approximately three hours occurs before a timer recording, the memory clears. Reset the date and time for timer recording.
- If a power interruption lasting less than approximately three hours occurs during a timer recording, the VIDEO TV stats recording again.
   If the recording start time of the program is same as the time set with ON/OFF TIMER

### If the recording start time of the program is same as the time set with ON/OFF TIME (pp.30-32)

 The ON/OFF TIMER has priority over the timer recording so that the timer recording will not start. In this case, set the recording start time earlier than ON/OFF TIMER and the timer recording will start.

49 50

Preface Preface



TIMER SET/CHECK
DATE START S
1/10WED 9:00PM 10
1/17H1 1:00PM 2
1/12H9 1:00PM 2
MON-FRI 11:00PM 2
EVERY-SAT 11:00PM 2 Use ‡ RETURN Exit NEAU

Press TIMER ON SCREEN again to return to the original screen.

#### **Changing or Cancelling the Timer Settings**

The timer settings can be changed or cancelled by referring to the TIMER SET/CHECK display.

Press TIMER ON SCREEN. TIMER SET/CHECK screen appears



TIMER SET/CHECK
DATE START S
1/10WED 9:00PM 10
1/11THU 1:00PM 2
1/12TH 1:00PM 2
MON-THI 1:00PM 2
EVERY-SAT 11:00PM 2 K 1/6 SAT STOP CH 10:55ms 25ep 2:5ms 10er 2:15ms 10ep 2:15ms 25er 2:15ms 25er 2:15ms 25er 2:15ms 25er Use & RETURN Exit MENU

Press △+ or ▽- to move the cursor to the program you wish to change or cancel





To change it, flash the item to be changed by pressing BACK SPACE and make the required changes by pressing △+ or ▽-





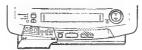
To cancel it, move the cursor to the item to be cancelled by pressing  $\triangle$ + or  $\nabla$ then press CLEAR.

Press TIMER ON SCREEN to return to the original screen.

#### QUICK TIMER RECORDING

#### The TIMER SET/CHECK display

- · When a recording is set for only one day, that setting is erased from the TIMER SET/CHECK display after the recording is
- · The timer recording programs by using VCR Plus+ is also displayed in the TIMER SET/CHECK on-screen menu.



. To extend the Quick Timer Recording time, press QUICK TIMER REC. to

. To clear the Quick Timer Recording

setting, press QUICK TIMER REC until

. If the tape runs out during Quick Timer Recording, recording will stop and the power goes off. The tape will not rewind

. If a power interruption occurs during

Quick Timer Recording, recording will

stop and the power goes off. If the power

interruption lasts less than three hours and the power is restored before the

recording end time, recording will start

advance the recording time in 30-minute

Notes

time length is 0:00

again from that point.

automatically.

This function is convenient when, for example, you want to set the VCR to start recording immediately without going through the whole timer setting procedure.

#### Notes

- . Make sure that the clock is set correctly before you activate Quick Timer Recording.
- . During Quick Timer Recording, you cannot change the channel on the VIDEO TV.

Insert a cassette. The VIDEO TV automatically turns on.

Press INPUT SELECT so that a channel number appears. Press TAPE SPEED to select the recording speed, SP or EP

Select the desired channel number with the 0-9 buttons or CHANNEL +/-If you try to select the Cable TV channel, first set CABLE to ON in SET UP

Press QUICK TIMER REC on the front panel.

QUICK TIMER REC QUICK TIMER

QUICK TIMER

5 Each time you press QUICK TIMER REC, the time length advances in 30-minute increments up to 8 hours minute increments up to 8 hours.

> QUICK TIMES SEC

After you select the desired time length, Quick Timer Recording starts from

51

Preface

Preface

52

that point.

#### 1-16. INDEX FUNCTION

SLEEP JUMP

2 3

ž (+ 1)

MEYU

RETURN

**(4) (5) (6)** 

PLOS TNERCHSCHEEN CLEAR

200

-

RM-Y138/W

1

0 (8) (9)

DISPLAY
COUNTERVERY
REDUCE
REDUCE ENTER

INDEX signal marks on the tape let you scan through the start of different programs or search for a specific section of tape.

#### Marking INDEX Signals

#### Automatic INDEX mark

An INDEX signal is automatically marked at the beginning of recording.



#### Manual INDEX mark

INDEX signals can be marked at any desired point during any recording or normal playback.

Press INDEX once. INDEX 00 appears.



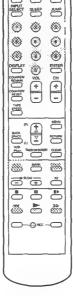


Then press MARK at the point where you want to mark INDEX signal. INDEX MARK appears on the screen.



#### Notes

- . Leave an interval of more than 2 minutes between INDEX signals when marking them one after the other so that the VCR can detect them correctly.
- . While an INDEX signal is being marked during playback, the recorded sound will not be heard, but it will not be erased.
- · You cannot mark an INDEX signal in the following cases:
- On a tape without safety tab.
- On an unrecorded portion of a tape.
- · Immediately before a point on the tape where the tape speed changes.



RM-Y138/W

#### Playing Back From the INDEX Point

The beginning of each program can be found and played back by using the INDEX

Insert a cassette with INDEX signals.

Press INDEX once during playback. INDEX 00 appears on the screen.





Press either FAST FORWARD ➤ or REWIND/REVIEW to start the INDEX scan. The tape rewinds or rapidly advances to the next marked signal.

The tape plays back for about 5 seconds, then rewinds or rapidly advances to the next INDEX signal. Each time INDEX signal is detected and playback begins, the INDEX scan number (INDEX SCAN 04) appears.



When the desired program is detected, press PLAY▶ Playback starts from that point.



#### Locating the Desired Program (INDEX Search)

A particular program can be located and played back by designating how many INDEX signals ahead or behind that program is from the current position.

Insert a cassette with INDEX signals.

Press INDEX.
INDEX 00 appears.





3 Using the 0-9 buttons, enter the number of INDEX signals you want to skip. For example, if the tape is at INDEX 02 and you want to locate INDEX 05, press 0 3.

You can select maximum location by INDEX 99.

Press either FAST FORWARD ▶ or REWIND /REVIEW ◀

INDEX SEARCH03 appears on the screen. When the desired signal is found, playback begins automatically.





#### Erasing INDEX Signals -

You can erase unnecessary INDEX signals.

Press INDEX during STOP mode. INDEX 00 appears.

Press ERASE.

INDEX ERASE appears on the screen.





Note

While INDEX signal is being erased, the

recorded sound is temporarily muted.

Press either FAST FORWARD► or REWIND/REVIEW ← The first subsequent INDEX signal is erased and the tape begins playback.

#### 1-17. TROUBLESHOOTING

If you have a problem with the VIDEO TV, first check the power cord connection, then go through the following list. Should the difficulty persist, unplug the unit, and contact your Sony dealer or local authorised Sony service facility.

#### **VIDEO TV RECEPTION**

| Symptoms                       | Suggestions                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------|
| No picture or sound            | Make sure the unit is plugged into a working AC outlet.                           |
|                                | Make sure it is not set to LINE IN mode.                                          |
|                                | Check that POWER is set to ON.                                                    |
|                                | Check the antenna wires, connections and direction.                               |
| Picture OK, sound poor         | Adjust the sound.                                                                 |
| Sound OK, no picture           | Try another channel.                                                              |
|                                | Adjust the picture.                                                               |
| Picture weak or blurred        | Check the antenna wires, connections and direction.                               |
| T IOLOGO TIBURI SI SIGNO       | Adjust picture control.                                                           |
| Picture rolls vertically       | Check the antenna wires, connections and direction.                               |
| Ghosts (multiple images)       | Check the antenna wires, connections and direction.                               |
|                                | Install a directional antenna.                                                    |
| Wrong color or no color        | Adjust color and hue controls.                                                    |
| No response to button pressing | Press the buttons carefully again. Unplug the set, then plug it in and try again. |
| No response to remote control  | Check the polarity (+and) of the batteries.                                       |
|                                | Replace the batteries.                                                            |

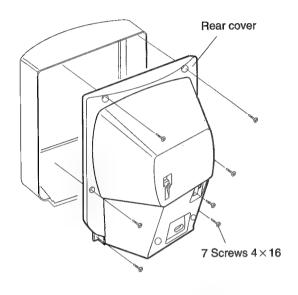
#### **TROUBLESHOOTING**

#### **VCR OPERATION**

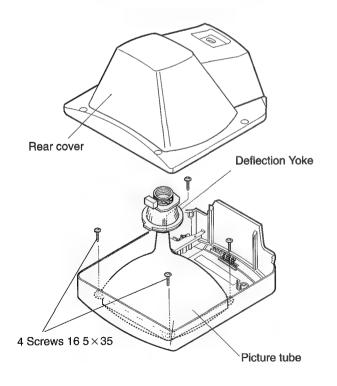
| Symptoms                                                                              | Suggestions                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cannot load video cassettes                                                           | Insert the cassette with the window side up and the safety tab facing you.     Check if a video tape is already in the VCR.                                                                    |
| No operation when buttons are pressed                                                 | Cancel the Quick Timer Recording.                                                                                                                                                              |
| Auto play function doesn't work or TV programs can't be recorded                      | Make sure that the receiving channel of the set is properly tuned.  Make sure that the safety tab on the video cassette tape is still intact.  Check antenna wires, connections and direction. |
| Timer recording can't be performed                                                    | Make sure the recording start/stop time is correct.     Reconnect the power plug to an AC outlet, and reset the program recordings.                                                            |
| There is no picture in playback, or the playback picture is noisy or contains streaks | Check that power is set to ON. Check that the video cassette tape has a recorded program. Check the tracking control (for noise streaks)                                                       |
| Video cassette tape was inserted incorrectly                                          | Wait a few seconds. The video cassette tape should eject itself.                                                                                                                               |

# SECTION 2 DISASSEMBLY

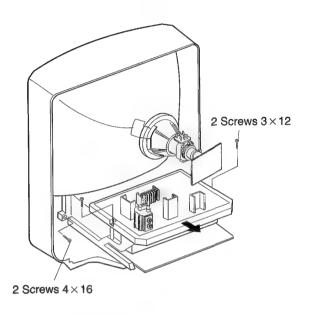
### 2-1. REAR COVER REMOVAL



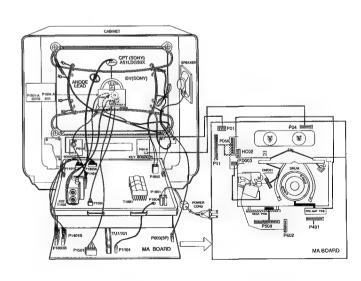
### 2-3. PICTURE TUBE REMOVAL



### 2-2.CHASSIS ASSY REMOVAL

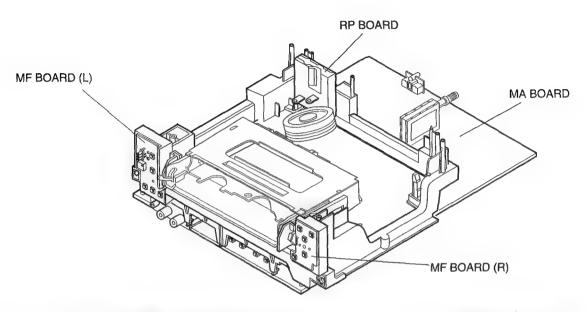


## 2-4. WIRE DRESSING



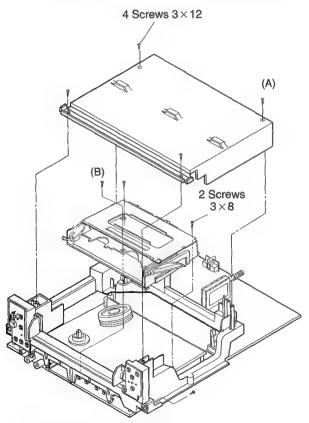
#### 2-5. CIRCUIT BOARDS ARRANGEMENT

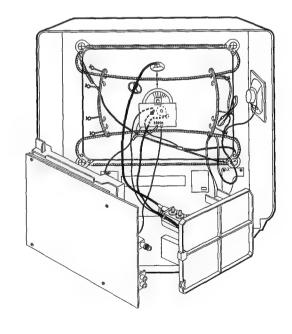
Remove the top case from deck assy and main frame.



# 2-6. TOP CASE & HOUSING ASSY DISASSEMBLY

2-7. SERVICE POSITION

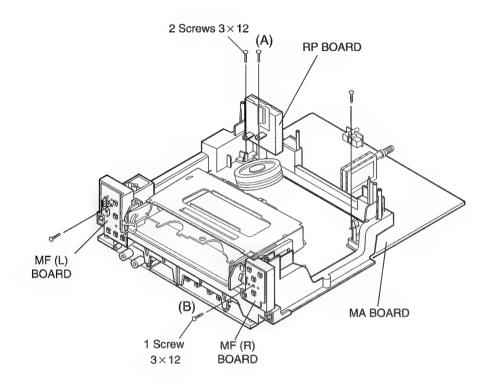




- 1) Remove the top case by removing 4 screws (A) on the main frame
- Remove two screws (B) and then separate the housing assy and main frame

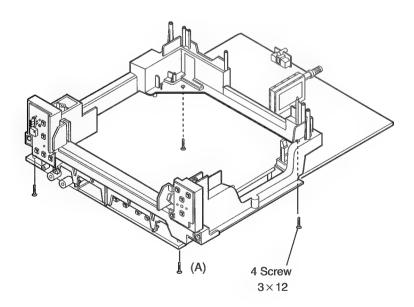
#### 2-8. DECK & RP BOARD DISASSEMBLY

- 1) Remove two screws (A) for disassembling the shield case.
- 2) Remove screw (B) and then separate the main frame and MF (R) board.



#### 2-9. MA BOARD DISASSEMBLY

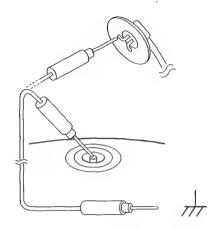
Remove 4 screws (A) and then separate the main frame and MA board



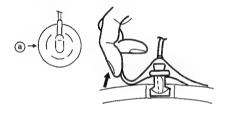
#### · REMOVAL OF ANODE-CAP

NOTE: Short circuit the anode of the picture tube and anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

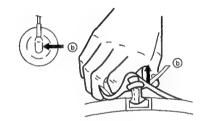
CAUTION: Anode-cap must be removed after discharge.



#### REMOVING PROCEDURES



 Turn up one side of the rubber cap in the direction indicated by the arrow (a).



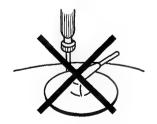
② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow ⑤.

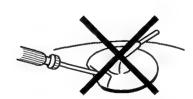


When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ©.

#### HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp objects.
- ② Don't press the rubber or you will hurt the inside of the anode-cap. A material fitting called as shatter-hook terminal is built in the rubber.
- 3 Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.





# SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete re-alignment is required or a new picture tube is installed
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switches should be set as follows unless otherwise noted.

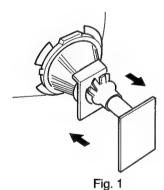
| Standard Picture condition. | - PICTURE   | 80% |
|-----------------------------|-------------|-----|
|                             | BRIGHT      | 50% |
|                             | HUE         | 50% |
|                             | COLOR       | 50% |
|                             | — SHARPNESS | 50% |

#### Preperation:

- Input a white signal.
- Before starting, degauss the entire screen

#### 3-1. BEAM LANDING

- 1. Input a raster signal with the pattern generator.
- Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Fig.2
- 3. Input a green raster.
- Move the deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are at the sides evenly. (Fig.3)
- Move the deflection yoke forward, and adjust so that the entire screen becomes green. (Fig 1)
- Switch the raster signal to red and blue and confirm the condition.
- When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
- When landing at the corner is not right, adjust by using the disk magnets (Fig.4)



purity control

Fig. 2

Perform the adjustments in order as follows

- 1 Beam Landing
- 2. Convergence
- 3. Focus
- 4. H-line and White Balance

Note: Test Equipment Required.

- 1 Color bar Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4 Digital multimeter

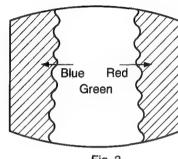
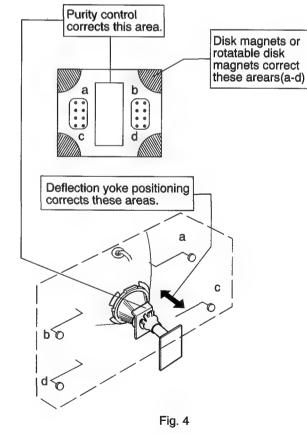


Fig. 3



#### 3-2. CONVERGENCE

Preperation:

- Before starting, perform FOCUS, H.SIZE, V.LIN and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Input a dot signal.

#### (1) Horizontal and Vertical Static Convergence

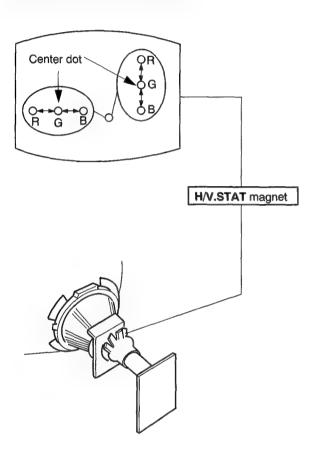
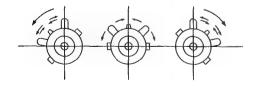
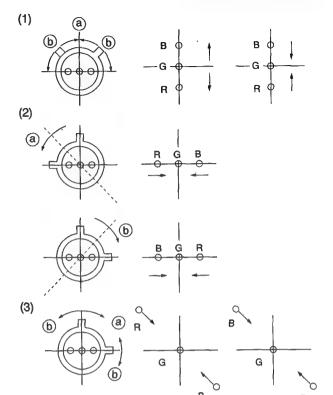


Fig. 5

• Tilt The H/V. STAT magnet and adjust static convergence to open or close the H/V. STAT magnet.



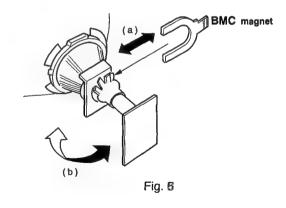
When the H/V.STAT magnet is move in the direction of arrow
 and (), red, green and blue dots move as shown below



If the blue dot does not cover with red and green dots, refer to Fig 6 perform the following steps.

- Move BMC magnet (a) to correct insufficient H. static convergence.
- Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.



## (3) Screen-corner Convergence

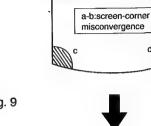
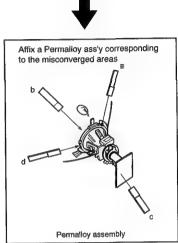


Fig. 9



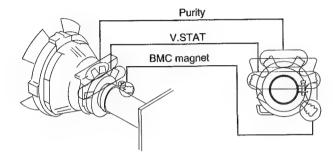
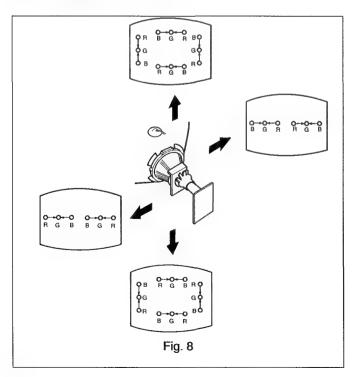


Fig 7

## (2) Dynamic Convergence Adjustment

#### Preparation:

- Before starting, perform Horizontal and Vertical static convergence Adjustment
- 1. Slightly loosen deflection yoke screw
- 2. Remove deflection yoke spacers.
- 3 Move the deflection yoke for best convergence as shown
- 4. Tighten the deflection yoke screw.
- 5 Install the deflection yoke spacers.



#### 3-3. FOCUS ADJUSTMENT

- Input Cross Hatch Pattern.
- Turn the focus control (VR1907) knob on the C board to obtain the best focus in the center and circumference.

## 3-4. SCREEN (G2)

- 1. Input a dots pattern.
- 2. Set the PIC, BRT controls at minimum.
- 3. Supply DC 160V by equipment into R.G. and B cathode.
- 4. Adjust VR1908 (SCREEN) so that the raster is invisible.

## 3-5. WHITE BALANCE ADJUSTMENT

- 1. Input a all white signal.
- 2. Set the PICTURE to minimum and set the BRIGHT at normal. (Refer to P.12 of this manual for the adjustment.)
- 3. Turn VR1901 (R.DRIVE) and VR1902 (B.DRIVE) fully clockwise.
- 4. Adjust BIAS controls for best white balance.
- Set the PICTURE control to maximum. Observe the screen and adjust the DRIVE controls for best white balance.
- 6. Repeat steps 4 and 5.

# SECTION 4 SAFETY RELATED CHECK

#### 4-1. CIRCUIT CHECK FOR SAFETY

- 1) Input the color bar signal.
- 2) Connect a 1/2W, 470K $\Omega$  resistor between Q1814-B of D board and GND (J90).
- 3) As soon as connecting the external resistor, the receiver stops operating (power:relay off). And removing the external resistor, the receiver operates normally when plug in the AC POWER CORD after plugging it out.

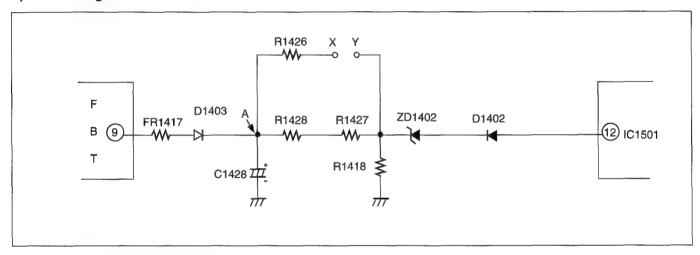
## 4-2. VERTICAL SHORT CIRCUIT CHECK

- 1) Input the color bar signal.
- 2) Short both terminals C1311 from outside.
- As soon as shorting C1311, the receiver stops operating.
   And removing the external short, the receiver operates normally.

#### 4-3. HOLD-DOWN CHECK

This procedure should always be performed when replacing the following components (marked with \_i on the Schematic Diagram).; IC1501, ZD1402, T1402, DY

#### 1) Circuit Diagram



#### 2) Circuit operating explanation.

## Normal condition

DC voltage appears at point X from FBT pulse by rectifying circuit consisted of FR1417, D1403, and C1428. DC voltage of point Y is divided into R1428, R1427, R1418 from DC voltage of point A.

In normal condition, DC voltage of point Y is lower than 6 volt.

So the set is operated normally.

#### Abnormal Condition

In abnormal condition, DC voltage of point X increase in proportion up to ? volt.

Therefore, the hold down circuit is operated.

In result, the horizontal frequency is stopped.

#### 3) Check the X-Ray protection circuit.

- a. Turn on the set and connect the color bar signal at the antenna terminal.
- b. Check the B+ voltage whether it is correct or not.
- c. If B+ is incorrect, power circuit is to be repaired.
- d. To check the operation of hold down circuit, short points X and Y.
- e. Identify the screen status whether raster is appeared or not.

- f. If there is distorted synchronism of screen, the set is OK.
- g. Remove the shorted jumper from points X and Y.

#### 4) Troubleshooting the Hold-Down circuit.

Shorting points Xand Y. check the voltage of point Y.

- If the voltage is below 6V DC, check ZD1404, C1428, L1406, R1419, FR1417, and D1403 and replace defective one.
- If the voltage is over 6V DC, C1405, R1405, IC1501 and replace defective one.

# SECTION 5 CIRCUIT ADJUSTMENT (TV & VIDEO)

#### 5-1. TV Part

#### 1. H-LINE ADJUSTMENT

#### 1) Preliminary Steps

- Input the standard White Signal.
- Set screen to standard condition.
- Set the red and blue driver (VR1901, 1902) to the mechanical center.
- Set the Bias controls (VR1903, 1904, 1905) to the mechanical a third position, (Min.-Max.)
- Make H-line by setting SW1201 to the center position.

#### 2) Adjustment

- Turn the Screen volume knob counterclockwise until the first horizontal line appears in the picture screen.
- Adjust two color bias controls for the colors which do not appear in the horizontal line so that the horizontal line becomes white.
- In state of the horizontal line is white, adjust screen volume so that the brightness of H-LINE become 0.3ft-L or so.
- Adjust SW1201 to the first position for the screen to appear.

#### 2. H-CENTER ADJUSTMENT

- Input the color bar signal.
- Set screen to the standard condition.
- Set the horizontal-center control VR1401 so that right side and left side of the picture are equal. (horizontal center)

#### 3. V-SIZE & V-CENTER ADJUSTMENT

- Input the Color bar signal.
- Set screen to normal position.
- Set screen to center of CRT by converting SW1301.
- Adjust the vertical size (VR1301) for approximately 1/2" overscan at the top and bottom of the display.

### 4. SUB-BRIGHT ADJUSTMENT

- Input the color bar signal.
- Push the MENU Key of the remote commander.
- Adjust VR1201 so that the step 2 and 3 are differentiated of sub-bright of pattern.
- Push the MENU Key of the remote commander again that the picture goes back to normal.

#### 5. AGC ADJUSTMENT

- 1. Input the color-bar signal.
- Adjust AGC VR of TU101 so that snow noise and crossmodulation disappear from the picture.
- 3. Confirm them at every channel.

#### 5-2. Video Part

This adjustment must be operate after DECK adjusting is finished

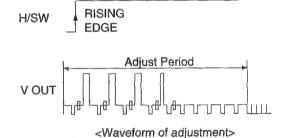
#### 1. PG ADJUSTMENT

### 1) Necessary Instruments

- 1) TAPE for exclusive use of SP
- 2) Oscilloscope
- 3) 10 1 Probe

#### 2) Adjustment

- 1) PLAY exclusive use of SP tape
- Connect oscilloscope (CH-1) to MAIN PCB J532 (H/SW) and VOL/DIV to 1V Range Trigger
- 3) Connect oscilloscope (CH-2) to MAIN PCB J601 (Video Out) and set it VOL/DIV 500mV Range
- 4) Set TIME/DIV of oscilloscope to 50 us Range
- 5) Adjust VR501 so that V-sync Falling Edge of Video signal become 412 usec ± 20usec.



\* CAUTION: Set oscilloscope trigger mode to DC

#### 2. NORMAL REC BIAS LEVEL ADJUSTMENT

#### 1) Necessary Instruments

- 1) Recording Tape
- 2) RMS Meter

#### 2) Adjustment

- 1) Convert SET to A/V input mode
- 2) Insert recording tape and press REC button
- 3) Connect RMS Meter's (+), (-) to MAIN PCB R606 both endsl respectively
- 4) At this time, adjust VR601 so that the RMS Meter's indicator become within 3.0mV±01mV

#### 3. Y/C SEP. ADJUSTMENT

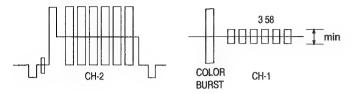
#### 1) Necessary Instrument

- 1) Oscilloscope
- 2) 10 1 Probe 2EA
- 3) Pattern Generator (Multi-Burst Signal)
- 4) Recording Tape

#### 2) Adjustment

- Input Multi-Burst signal (100%) of patern generator to Video in Jack
- 2) Turn the set to A/V MODE
- 3) Press REC button with insert recording Tape
- 4) Connect oscilloscope (CH-1) to MAIN PCB J473 (RF)
- 5) Connect oscilloscope (CH-2) to MAIN PCB J601 (V-OUT) and trigger in order to it indicates adout 2H

6) Set CH-1 of oscilloscope to 20mV Range, and adjust VR401 so that the (358MHz) Y component of rest multiburst signal become minimum



<Adjustment Waveform>

# SECTION 6 VCR DECK ADJUSTMENT

This adjustment must be operated after the assembling is finished as Chassis assy

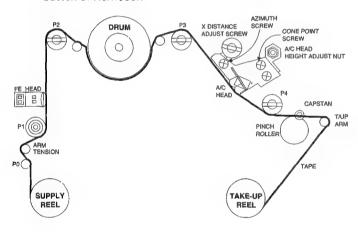
#### 1. TAPE PATH ADJUSTMENT

#### 1) Necessary Instruments

- 1) TAPE for exclusive use of SP
- 2) Osilloscope
- 3) 10 1 Probe 2EA
- 4) Particular Driver for adjustment (P2, P3, X-distance control, Audio (NUT) control)
- 5) RMS Meter (Audio Level Meter)

#### 2) Preliminary Steps

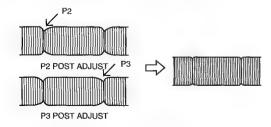
- 1) Connect oscilloscope (CH-1) to MAIN PCB J532(H/SW) (for Trigger of CH-2).
- Connect oscilloscope (CH-2) to MAIN PCB J473(RF). (When adjusting, use CH-2 waveform)
- 3) PLAY by insert TAPE for exclusive use of SP
- 4) As soon as the caption 'AUTO TRK' is appeared after play, make TRACKING intialization by press tracking control up(+) button of Remocon



<Adjust Parts Location>

#### 3) Confirm the RF linearity and adjustment

- Adjust P2 & P3 so that the waveform is maximum and stablized with viewing RF ENVELOPE waveform of SCOPE
- 2) Confirm ENVELOPE waveform is controlled to maximum by press TRK UP(+), DOWN(-) button step by step



<Adjustment waveform>

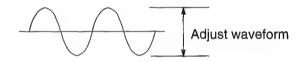
### 4) X-Distance Adjustment

- 1) Adjust Cone Screw of the DECK so that the RF waveform is maximum
- 2) Confirm that the RF waveform satisfy linearity by adjust TRK UP(+), DOWN(-) button step by step

**CAUTION:** To treat the 'POOR', when the RF waveform is maximum as turn the Cone Screw more than 2 wheel (2 turns; 720°)

## 5) Audio Level Confirmation and Adjustment

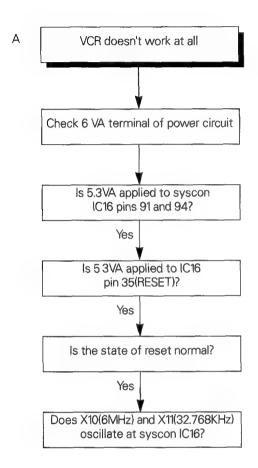
- Connect RMS Merer (Audio Level Meter) "+" terminal to MAIN PCB R620 and "-" terminal to GND, respectively.
- Confirm that the RMS Meter's Audio Level satisfy the following spec and fine control Azimuth Screw of A/C Head in Audio reduction.
- 3) Audio Level Spec 1K , -7 8dBm ± 3dBm 7K , (1KHz) + 3, 5dBm

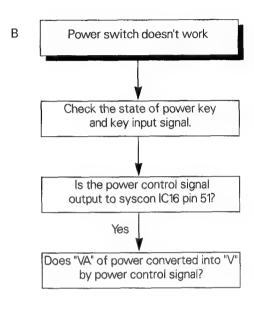


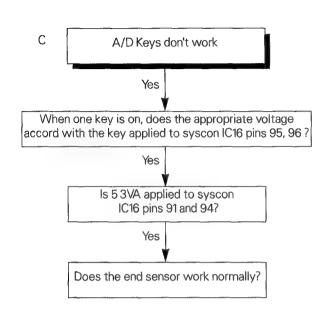
<Adjustment Wavefrom>

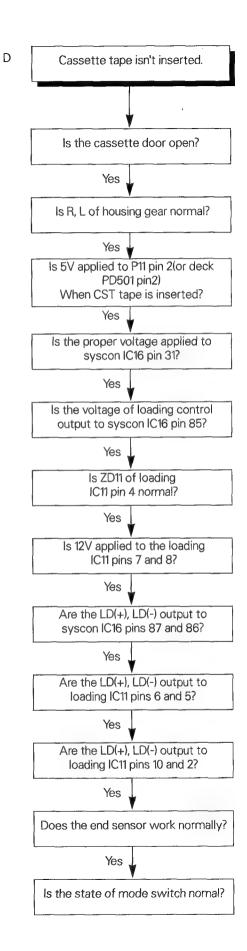
# SECTION 7 TROUBLESHOOTING CHARTS

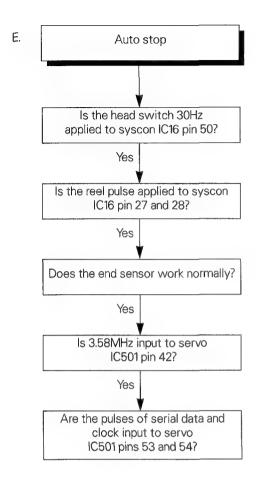
## 7-1. System Control Part.

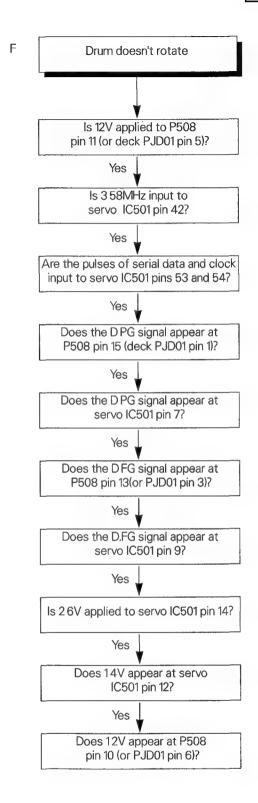


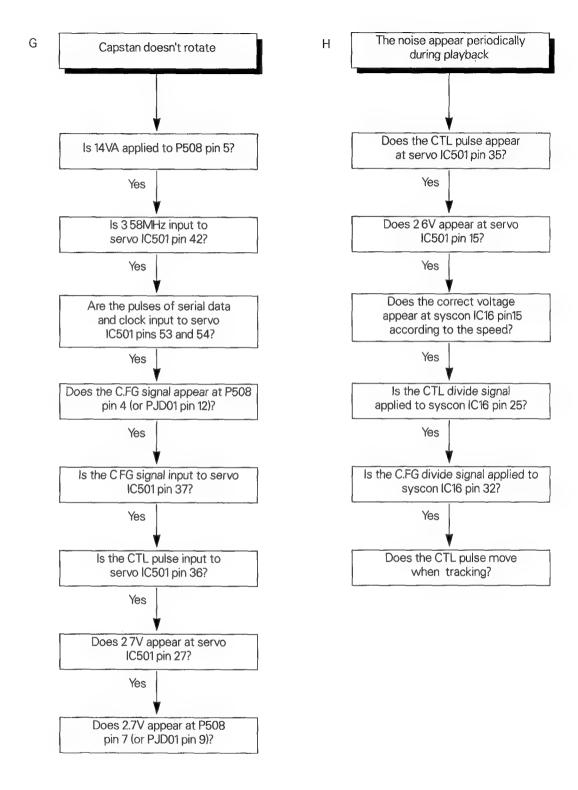




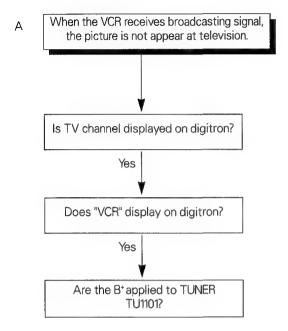


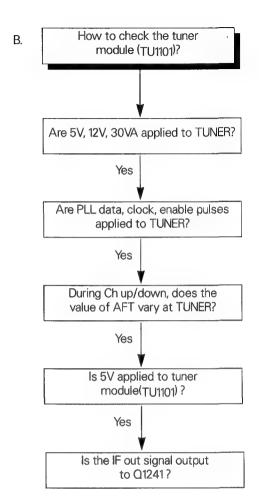


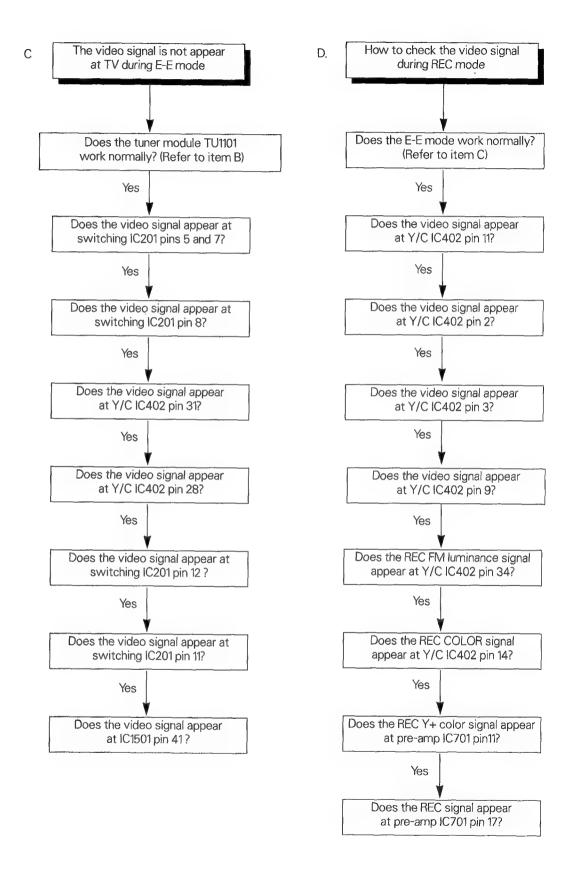


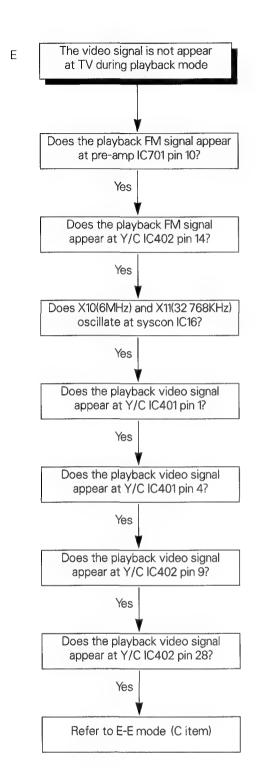


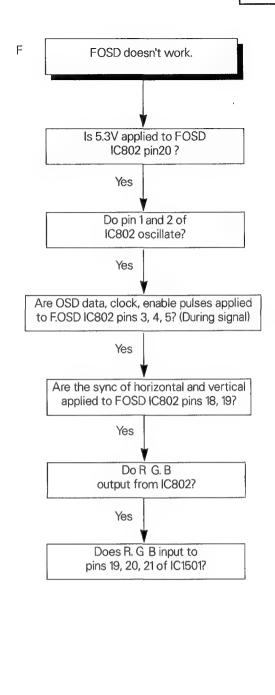
## 7-2. Video Part.



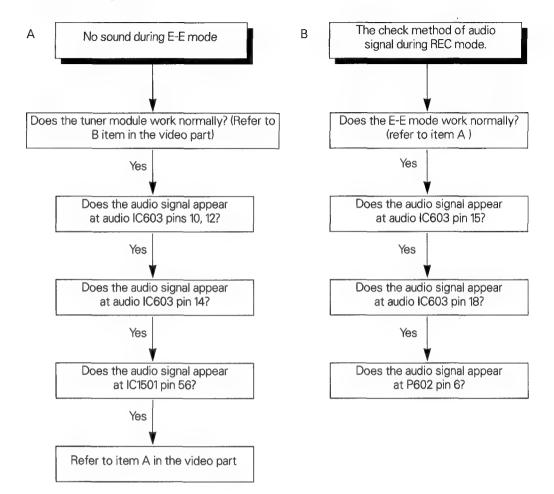


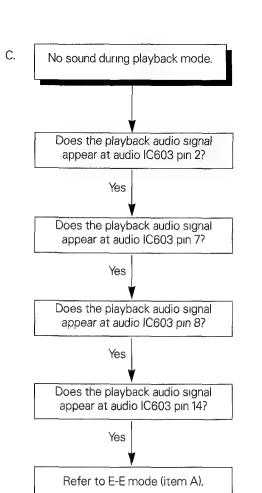






## 7-3. Audio part.

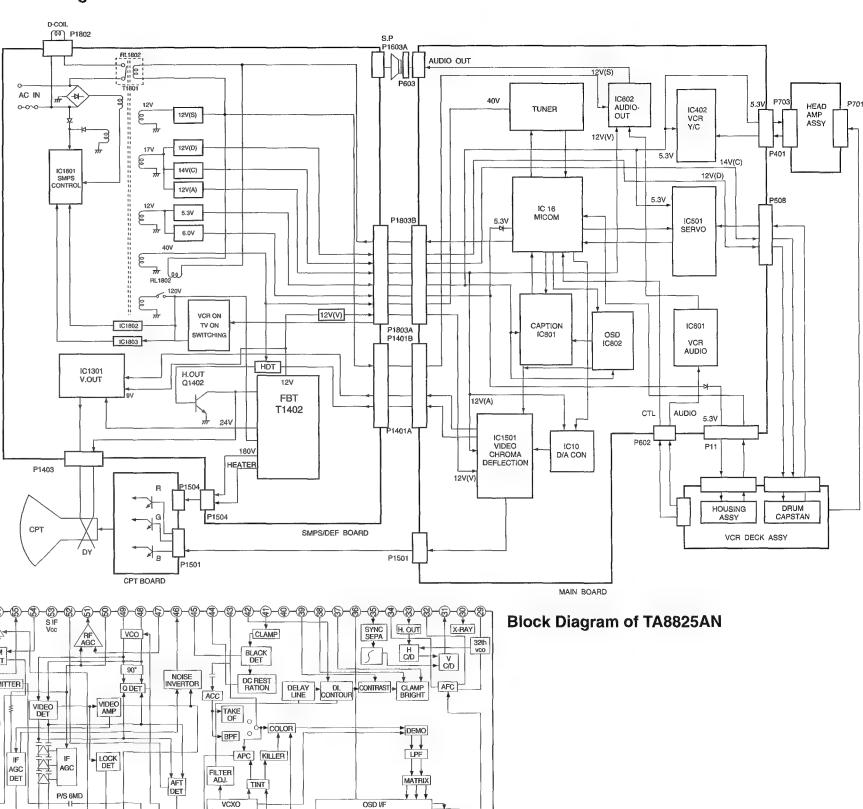




KV-20/13VM30/31 RM-Y138/W KV-20/13VM30/31 RM-Y138/W

# SECTION B DIAGRAMS

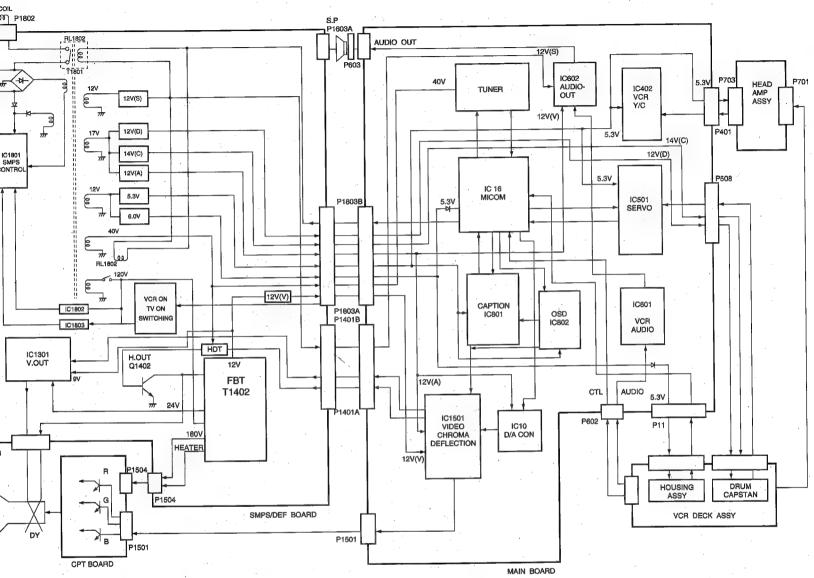
## 8-1. Block Diagram

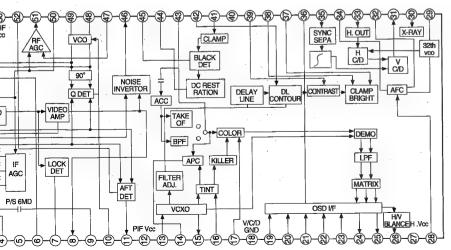


V/C/D OND

## SECTION 8 DIAGRAMS

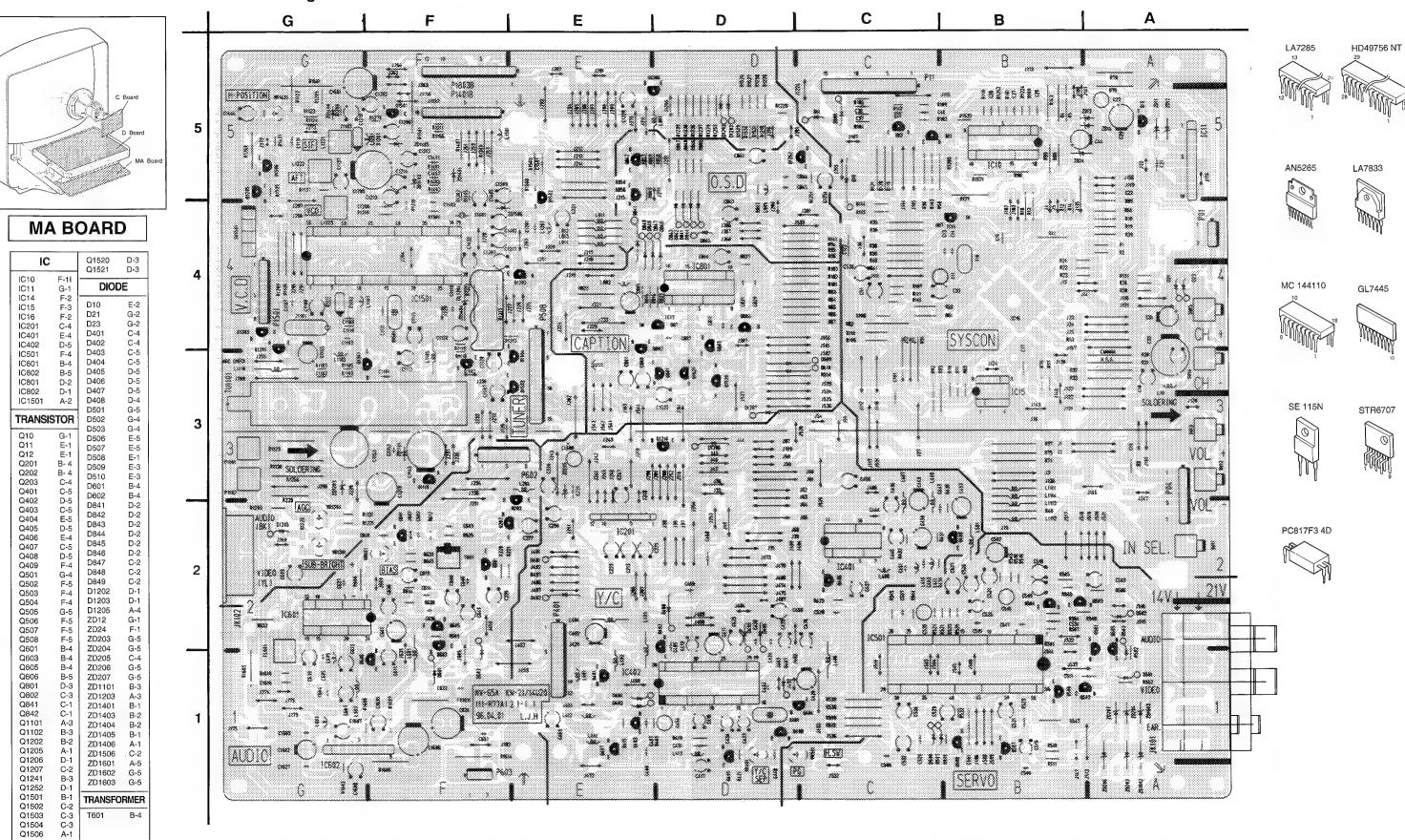
## Diagram





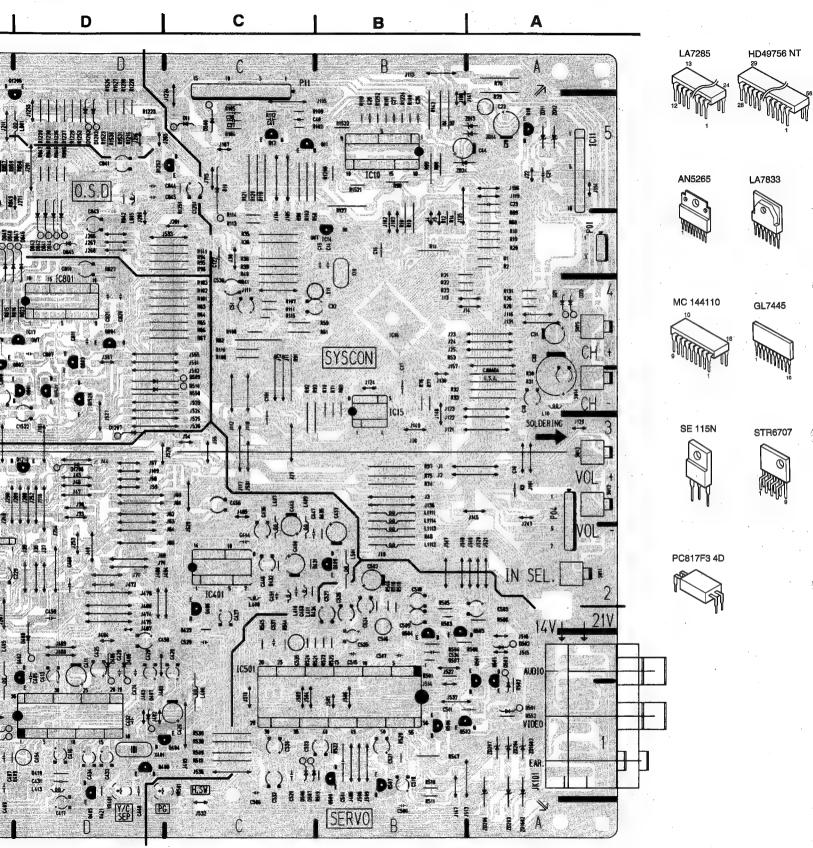
## **Block Diagram of TA8825AN**

## 8-2. Circuit Boards Location & Printed Wiring Boards

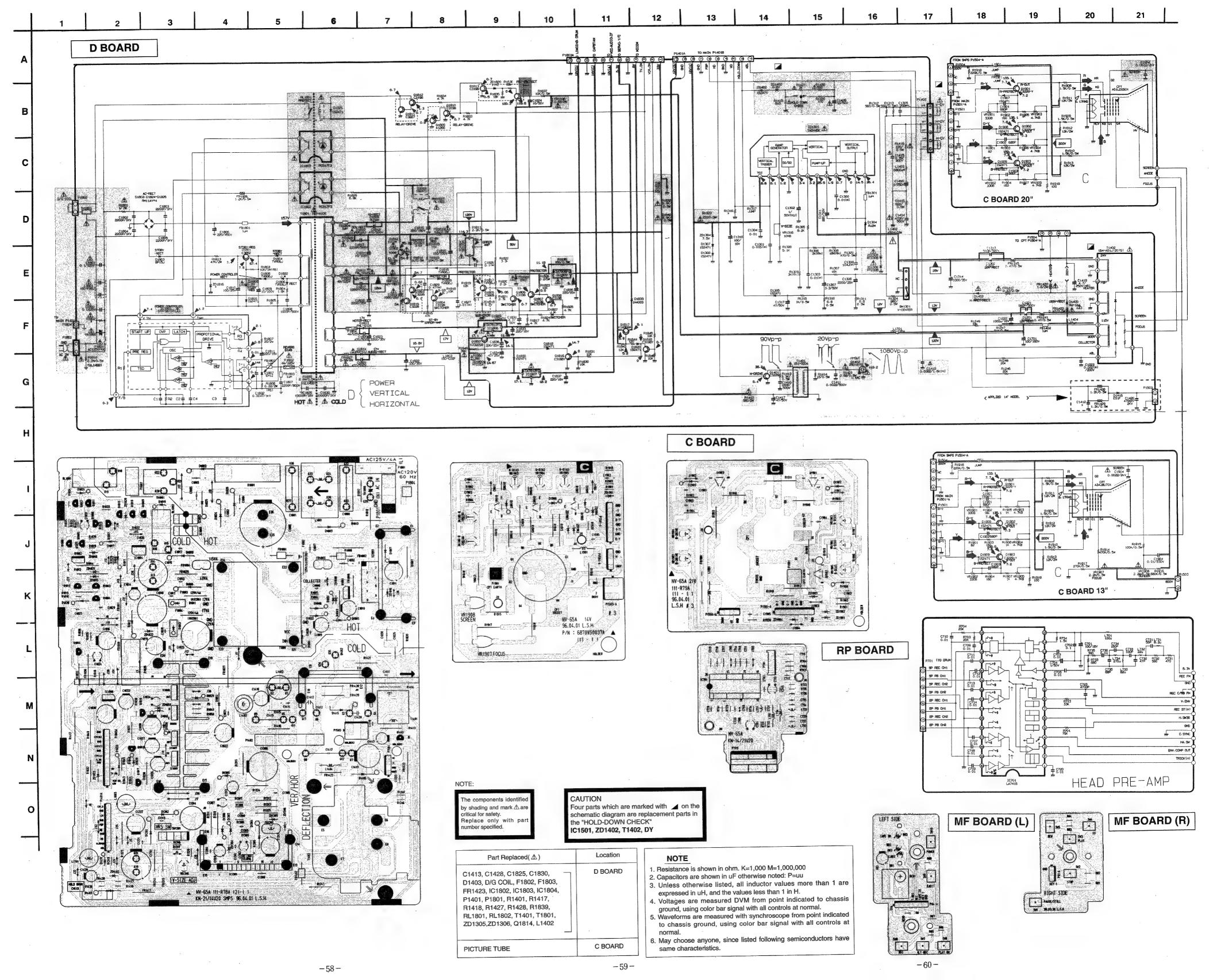


8-3. Semiconductors

## 8-3. Semiconductors

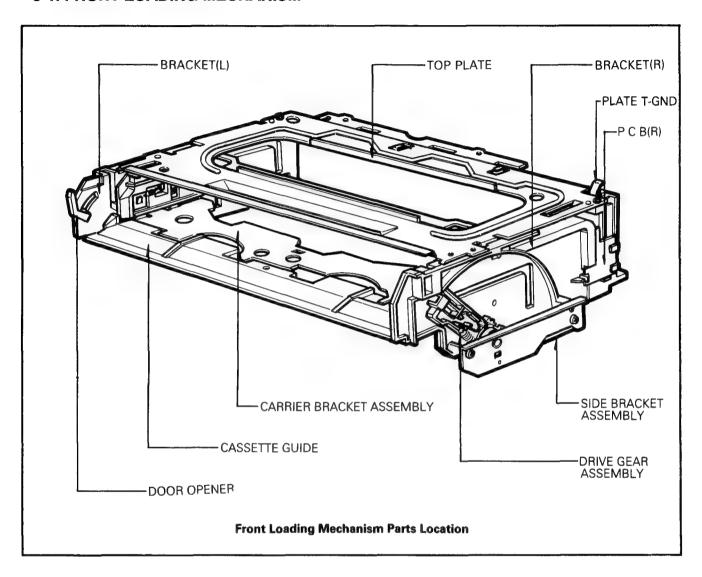


8-4. Schematic Diagrams & Printed Wiring Boards CAUTION Four parts which are marked with on the schematic diagram are replacement parts in the "HOLD-DOWN CHECK" IC1501, ZD1402, T1402, DY **MA BOARD** 12 13 15 18 21 1 TUNER/AV 1KHZ)
R11223 R1122 4-8
5-1K 7-5K 01201 9#1501 5WC 9# R1107 330 R1103 4 7k 6.2 R1305 C1102 1.6k 77 0.01 岩路 4-3-4 01205 1007H1) A12707 R1535 [H1] A12707 R1535 R1166 JL 1202 R1503 JL 1501 TC 1201 TK 1501 TK 1501 220UH C R1506 2 220/0-5 R1301 R1302 3-9K 1-8K 5.0 Rugs 01202 Rt230\$ 5 100 VR1431 00 10K-8 R141 ₹ V REC MODE F1101 C27 10K T0:01 () : PB MODE NO MARK : CONSTANT 100k 1000F OPTION H (R30.) CANADA R19 270 MODE SERIAL DEC STATE IN STA SHK ORUM DRUM F. V CAP PO SMH C509 47/16V FF VP GEN: # CS1 # 47/16V # 224 # C19 L10 # (04) # 47/16V 28u 100 (2007) (2007) (2007) (2007) (2007) ZD206 % 11V ZD207 11V CS08 0. 033(M) F512 3. 3x (RH) VF501 VF501 1000B 11.1 5.3 0.1 2 6.0 0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 6.0 0.1 2 P518 18718v = ₹R552 1M VP601 100KB 180K (AH) 1 C122 56K R1603 0. 1 0. 0501 0. 05001 0. 05001 0. 05001 D510 152471 152471 20 CS38 PRO2 152471 20 CS38 5. 0x 5.1 010 010 012129 | 20W30 | 13W30 | 20W30 | 20W3 3220mVp\_p 428Vp\_p 51.7Vp\_p 615.75KHZ 750HZ 750HZ 1 2.8 Vp-p (B) 0. 2Vp\_p (G) 1. 4Vp\_p (D) (1) 4. 144p\_p (D) (1) 3. 2Vp\_p (D) (1) 4. 0Vp\_p (D) (1) 7Vp\_p N -55--56-



# SECTION 9 MECHANISM DISASSEMBLY

## 9-1. FRONT LOADING MECHANISM



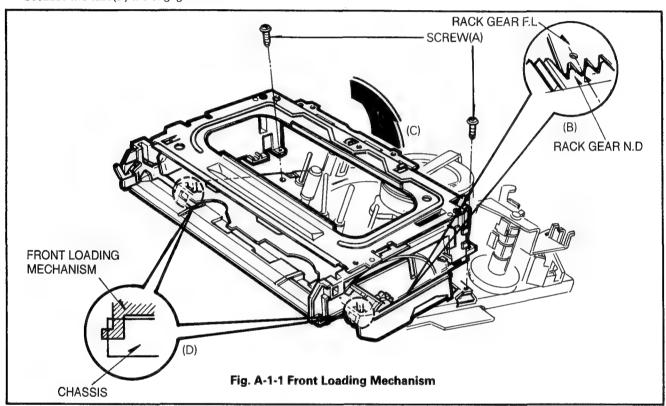
- Component list below will be discribed as if the top and bottom covers and the front panel have already been removed.
- 2 P.C.B Assembly
- 3. Top Plate
- 4. Carrier Bracket Assembly

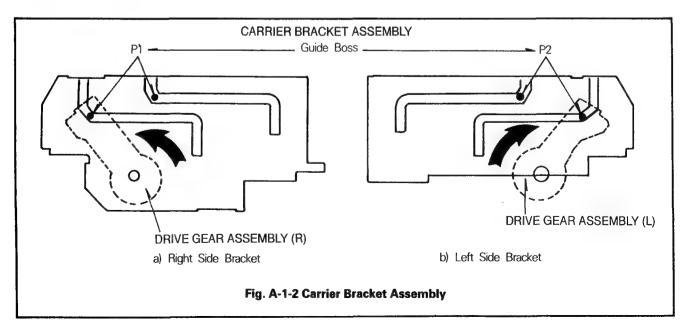
- 5 Cassette Guide
- 6 Side Bracket Assembly
- 7 Bracket(L), (R)
- 8. Door Opener
- 9 Drive Gear Assembly

## 1. Front Loading Mechanism Assembly (Fig. A-1-1)

- 1) Remove the Top and Bottom Covers and the Front panel.
- 2) Unplug the connector
- 3) Remove two screws(A)
- Lift up the Front Loading Mechanism in the direction of arrow(C)

- 1) When disassembling and reassembling
- ① Give special attention to removal and to reassemble, because two tabs(D) are engaged.
- ② Make sure that Bosses of Bracket(L),(R) are properly engaged in the holes of the chassis.
- ③ To reassemble Front Loading Mechanism, the Drive Gear Assembly should be turned in a counterclockwise as shown in Fig A-1-2 so that the Rack Gear N.D of Front Loading Mechanism Assembly is meshed into Rack Gear F L of Deck Mechanism Assembly correctly as shown in Fig A-1-1 (B)





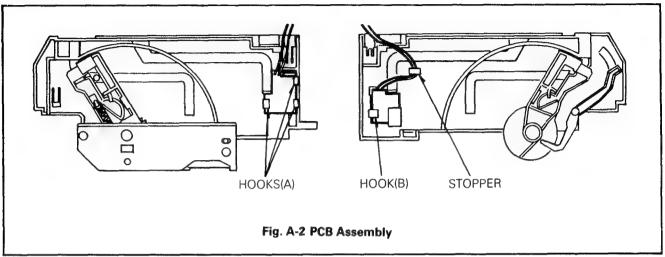
## 2. PCB(Printed Circuit Board) Assembly

#### 2-1. P.C.B Assembly(R)(Fig. A-2)

- Remove the PCB Assembly(R) by pushing three Hooks
   (A) outward
- 2) Release the Lead wire from stoppers

#### 2-2. PCB Assembly(L).(Fig. A-2)

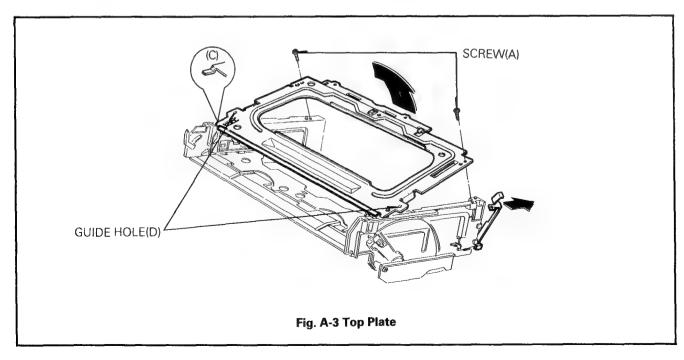
- Remove the PCB Assembly(L) by pushing the Hook(B) outward
- 2) Release the Lead Wire from stoppers



## 3. Top Plate(Fig. A-3)

- 1) Remove two screws(A)
- 2) Push the upper part of Top plate Ground and then lift up the Top Plate in the direction of arrow(B).

- When reassembling, be certain that the tabs(C) of Top Plate is in both Bracket(L),(R)
- ① Then align the guide holes(D) of Top Plate with Bosses of side Bracket(L),(R)



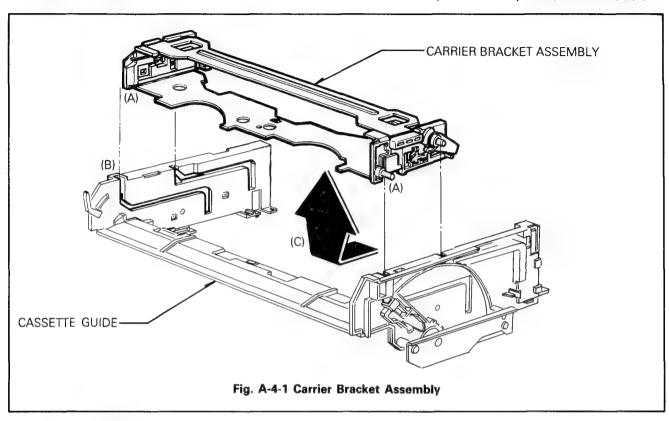
### 4. Carrier Bracket Assembly

#### 4-1. Carrier Bracket Assembly(Fig. A-4-1)

 Remove the Carrier Bracket Assembly by moving it in the direction of arrow(C)

#### \* NOTE

 When reassembling, be sure that parts(A) of Carrier Bracket Assembly are seated in parts(B) of Bracket(L),(R)



#### 4-2. Cassette Opener(Fig. A-4-2)

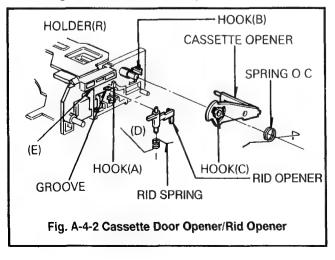
- Release the spring O C from the Hook(A) and then release it from Hook(C) of cassette opener
- Remove the cassette opener by releasing the Hook(B) from the Holder(R)

#### 4-3. Rid Opener(Fig. A-4-2)

1) Remove the rid opener by pushing it outward

#### \* NOTE

1) When reassembling, seat the upper part of the rid opener in the grooved of Holder(R) and push it inward.

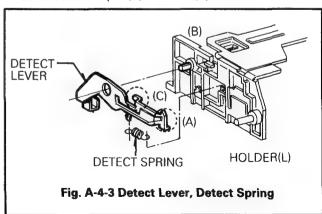


#### 4-4. Detect Lever and Detect Spring

- 1) Remove the spring detect
- Lower the side(A) of Detect Lever and then remove the Detect Lever by pushing it outward

#### \* NOTE

 When reassembling, make sure that the part(C) of Detect Lever set in the part(B) of Holder(R)

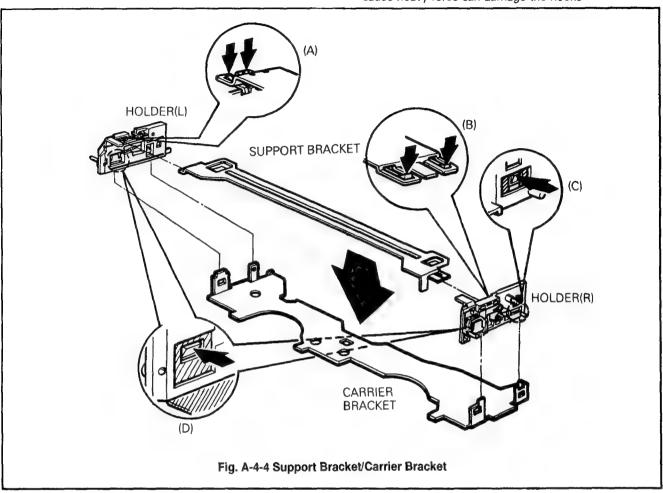


#### 4-5. Support Bracket Assembly(Fig. A-4-4)

1) Take the Support Bracket out by releasing hooks(A),(B)

#### \* NOTE

 When disassembling and reassembling, be careful because heavy force can damage the hooks



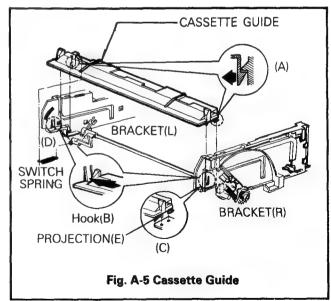
#### 4-6. Carrier Bracket Assembly(Fig. A-4-4)

1) Remove the Carrier Bracket by releasing hooks(C),(D)

#### 5. Cassette Guide(Fig. A-5)

- Remove the Switch Spring with the Front Loading Mechanism Assembly turned over
- 2) Push two hooks(B) outward
- 3) Remove the Cassette Guide by pushing two hooks(A). outward(if one is removed, the other will be easy to remove)

- 1) When reassembling
- ① Seat projections(E) of Cassette Guide in holes of Bracket Assembly(L),(R) and then engage the Hook(A)
- ② After finishing previous step, fix the Cassette Guide to the Bracket Assembly(L),(R) by pushing two hooks(B) inward

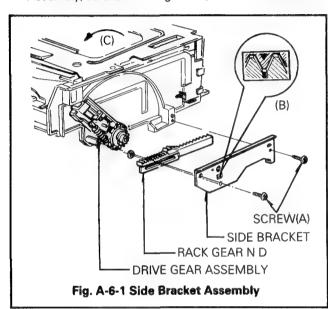


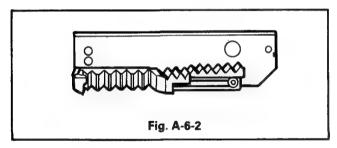
## 6. Bracket Assembly Side (Fig. A-6-1)

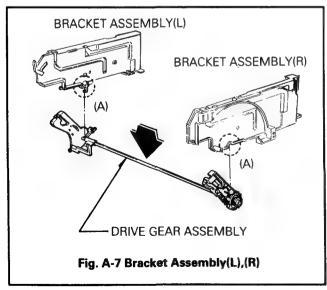
 Remove two screws(A) and then remove the Side Bracket Assembly and the Rack Gear N D

#### \* NOTE

- 1) When reassembling
- Turn the Drive Gear Assembly in the direction of arrow(C)
- ② Reassemble the Rack Gear N D to the Side Bracket Assembly, as shown in Fig A-6-2, and then reassemble







it to the Bracket Assembly(L), This time the Assembling Figure should be the same as(B) at the rectangular hole of Bracket Side

## 7. Bracket Assembly(L),(R)(Fig. A-7)

 Seperate the Bracket Assembly(L),(R) from the Gear Assembly Drive

#### \* NOTE

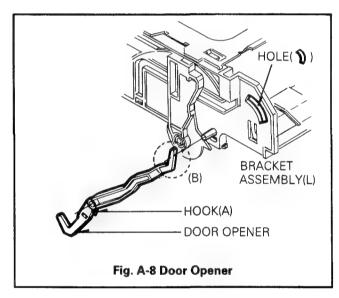
When reassembling, seat the shaft in the part(A) of Bracket Assembly(L),(R)

## 8. Door Opener(Fig. A-8)

1) Remove the Door Opener by pushing Hook(A) outward

#### \* NOTE

1) When reassembling, seat the part(B) of Door Opener in the hole( ) of Bracket(L)



#### 9. Drive Gear Assembly

#### 9-1. Drive Gear Assembly(Fig. A-9-1)

 Remove the Drive Gear Assembly from the Bracket Assembly(L),(R)

#### 9-2. Cushion Spring(Fig. A-9-1)

1) Remove the cushion spring from the Gear R

#### 9-3. Cap-D(Fig. A-9-1)

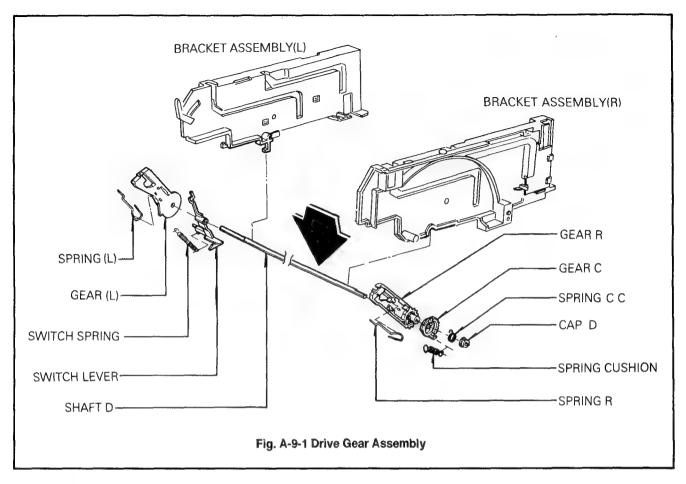
1) Remove the Cap-D by lifting it up

#### 9-4. Spring C.C(Fig. A-9-1)

1) Remove the Spring C C from the Gear R

#### 9-5. Gear C(Fig. A-9-1)

1) Remove the Gear C by lifting up when the projection of Gear C is aligned with the hole of Gear R while rotating the Gear C in the counterclockwise direction.



#### \* NOTE

1) When reassembling, seat the projections of Gear R in the holes of Gear C when the projection of Gear R is aligned with the hole of Gear C and then keep the Gear C turned in the clockwise direction

#### 9-6. Gear R(Fig. A-9-1)

1) Lift up the Gear R from the Shaft

#### 9-7. Spring R(Fig. A-9-2)

1) Remove the Spring R by releasing Hooks

#### \* NOTE

 When reassembling, be certain Spring R in the part(A) of Gear R

#### 9-8. Gear L.(Fig. A-9-1)

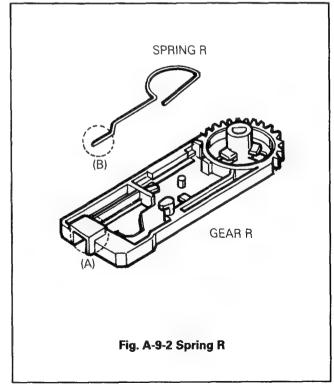
1) Remove the Gear L from the shaft

#### 9-9. Spring L (Fig. A-9-2)

- 1) Remove the Spring L by releasing Hooks from the Gear L
- \* NOTE: (Refer to the Spring R Section)

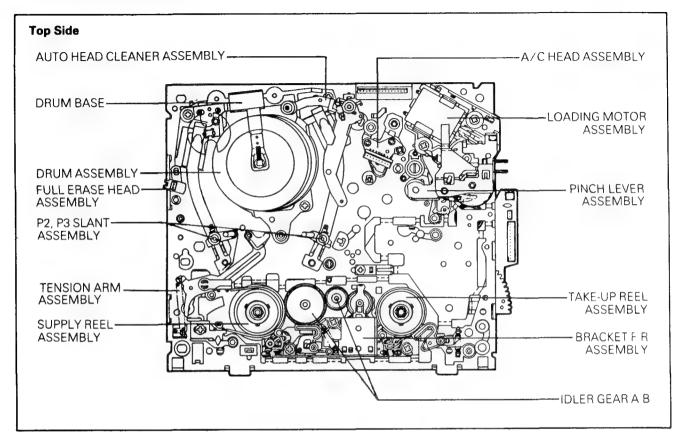
#### 9-10. Switch Lever(Fig. A-9-1)

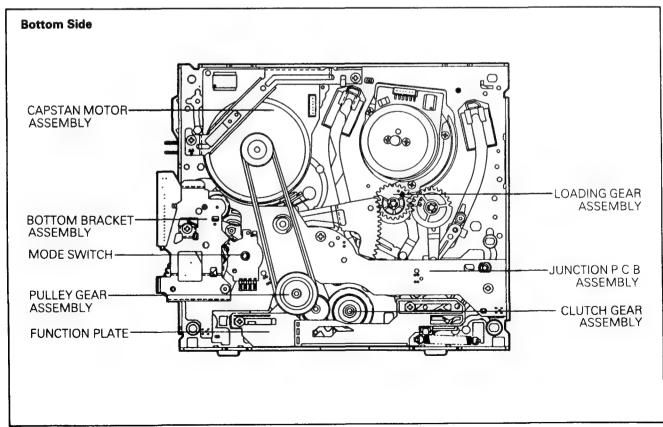
1) Remove the Switch Lever from the shaft



#### 9-2. DECK MECHANISM

#### Deck Mechanism Parts Location



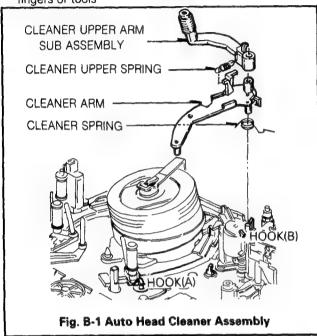


## 1. Auto Head Cleaner Assembly (Fig. B-1) (Optional Item)

- Remove the Cleaner Arm Assembly (Auto Head Cleaner Assembly) by pushing the Locking Tab (B) outward
- 2) Remove the Cleaner Upper Spring and then remove the Cleaner Upper Arm Sub Assembly
- 3) Remove the Cleaner Spring

#### \* NOTE

 When reassembling, do not touch the Video Head Tip with fingers or tools

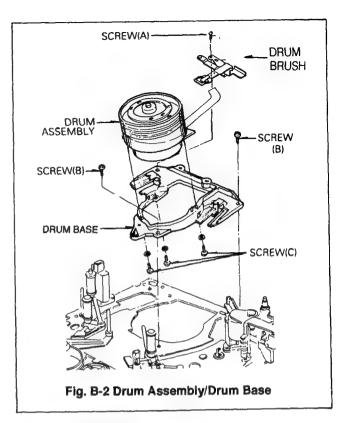


## 2. Drum Assembly and Drum Base(Fig. B-2)

- 1) Remove the Auto Head Cleaner Assembly (Option)
- Unplug the connector with the Deck Mechanism Assembly turned over
- 3) Loosen the screw(A) and then lift up the Drum Brush
- 4) Remove two screws(B) and then lift up the Drum Assembly and Drum Base from thε Deck Mechanism Assembly
- 5) Separate the Drum Assembly from the Drum Base by Loosening three screws(C) on the back of Drum Base

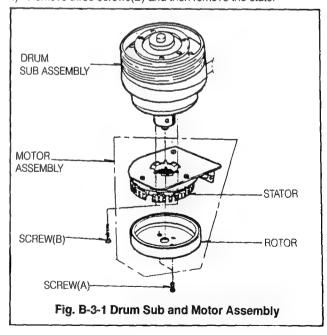
#### \* NOTE

- 1) When disassembling and reassembling
- ① Do not touch the Video Head tip with fingers or tools (Give special attention to disassembling and reassembling of Auto Head Cleaner Assembly)
- ② After reinstalling the Drum Brush, the Drum Brush should be aligned with the center of vertical axis of Drum Assembly
- 3 After completing the reassembly, adjust the transportation system and the Servo P G



## 3. Drum Assembly

- 3-1. Drum Sub and Motor Assembly (Fig. B-3-1)
  - : New Type (No two screws and P.C.B on the Drum)
- 1) Remove the Drum Base from the Deck Mechanism Assembly
- 2) Separate the Drum Assembly from the Drum Base
- 3) Remove two screws(A) and then remove the rotor
- 4) Remove three screws(B) and then remove the stator



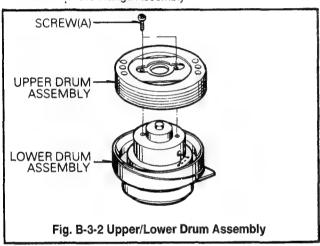
- 1) When disassembling and reassembling
- (1) Do not touch the Video Head Tip with fingers or tools.

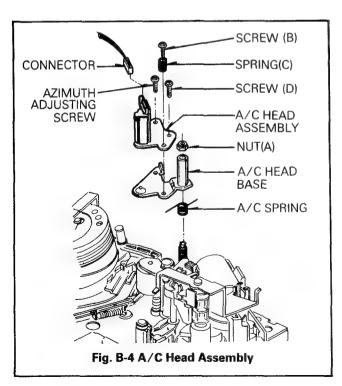
#### 3-2. Upper and Lower Drum Assembly (Fig. B-3-2)

- : Old Type (There are two screws and P.C.B on the Drum)
- Remove the Drum Assembly and Drum Base from the Deck Mechanism Assembly
- 2) Separate the Drum Assembly from the Drum Base.
- 3) Remove two screws(A)
- 4) Remove the PCB
- Separate the upper Drum Assembly from the Lower Drum Assembly.

#### \* NOTE

- 1) When disassembling and reassembling
- 1) Do not touch the Video Head Tip with fingers or tools
- ② Make sure that the color(white) marked on the P.C B of the upper Drum should coincide with the color(Green) marked on the Flange Assembly





## 4. A/C(Audio/Control) Head Assembly (Fig.B-4)

- 1) Unplug the connector
- Remove the Nut(A), and then lift up the A/C Head Assembly
- 3) Remove the Azimuth Adjusting Screw
- Remove two screws(B),(D) and then separate the A/C Head Assembly from the Base A/C Head Assembly

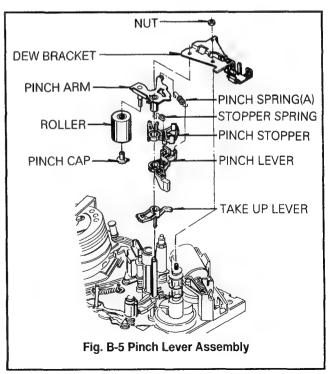
#### \* NOTE

- 1) When disassembling
- (1) First of all, release the spring A/C
- 2 Do not touch the A/C Head Tip with fingers or tools
- 3 After reinstalling the Audio Control Head Assembly, adjust the Tilt. Azimuth and Height of A/C Head

## 5. Pinch Lever Assembly(Fig. B-5)

- 1) Remove one Nut, and then remove the Dew Bracket
- 2) Lift up Pinch Lever Assembly.
- 3) Remove the Pinch Spring, and remove the Pinch Lever
- 4) Remove the Stopper Spring and remove the Pinch Stopper by lifting it up when the Hook of Pinch Stopper is aligned with the hole of Pinch Arm while rotating the Pinch Stopper in the counterclockwise direction.
- Remove the Pinch Cap, and then remove the Pinch Roller Assembly

- 1) When disassembling and reassembling
- ① Be careful not to get any foreign substance on the Roller.
- When disassembling the Pinch Cap, be careful not to damage the Pinch Arm

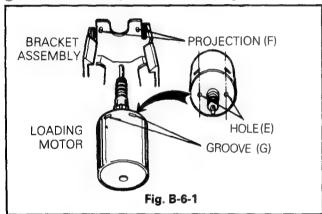


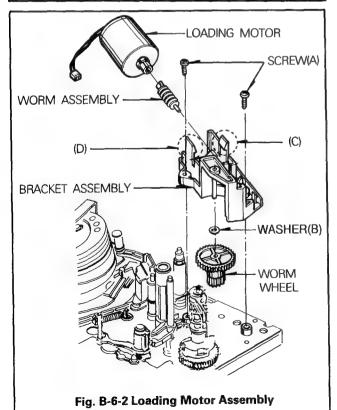
## 6. Loading Motor Assembly(Fig. B-6-1, B-6-2) 7. Take Up Lever(Fig. B-7)

- 1) Remove the Dew Bracket
- 2) Unplug the connector from the Junction P C B Assemblv
- 3) Remove two screws(A)
- 4) Remove the worm wheel by pushing it down
- 5) Remove the Loading Motor Assembly by pushing(C) and (D) outward
- 6) Remove the worm Gear Assembly from the Loading Motor Assembly by pushing it

#### \* NOTE

- 1) When reassembling
- ① Make sure that the worm assembly is seated in the axis of Loading Motor
- (2) Two grooves(G) of Loading Motor should be turned up and two projections(F) of Bracket Assembly should be seated in each at the two holes(E)(Fig. B-6-1)
- (3) Take notice of the polarity of the Loading Motor

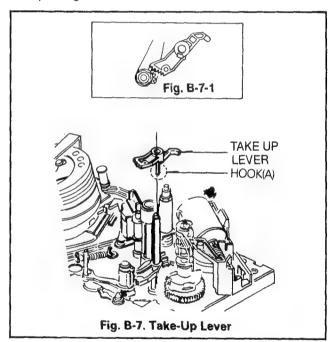




- 1) Remove the Loading Motor Assembly
- 2) Remove the Dew Bracket(Fig B-5).
- 3) Remove the Pinch Lever Assembly(Fig. B-5).
- 4) Keep the Pinch Gear turned in the clockwise direction (180°).
- 5) Remove the Take-Up Lever by pushing the hook(A) outward.

#### \* NOTE

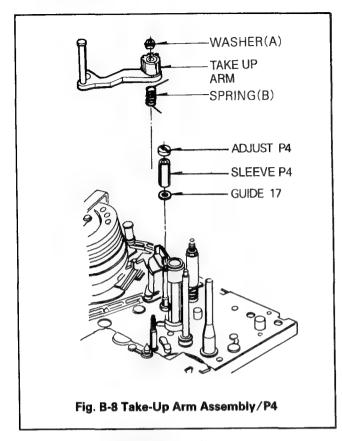
- 1) When disassembling and reassembling
- ① When disassembling the Take-Up Lever, be careful not to break the Hook(A)
- (2) When reassemble the Take-Up Lever, align the appendant Gear of Lever Take-Up with the appendant Gear of Take-
- (3) Reassemble the Take-Up Lever completely by hooking
- (4) Be sure to replace together Take-Up Lever and Pinch
- Be sure to assemble Pinch Lever Assembly before operating.



## 8. Take Up Arm Assembly(Fig. B-8)

- 1) Remove the Loading Motor Assembly.
- Remove the Dew Bracket, Pinch Gear, and the Take-Up Lever.
- Remove one Washer(A).
- 4) Remove the Take-Up Arm Assembly by lifting it up.
- Remove the spring(B).

- 1) When reassembling
- ① Align the Gear of Take-Up Arm with the Gear of Take-Up Lever(Fig. B-7-1).

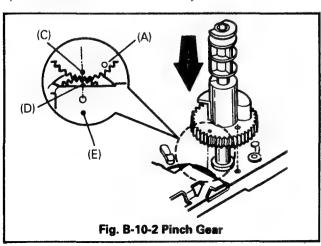


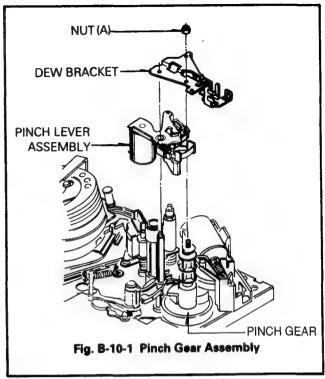
#### 9. P4 Assembly(Fig. B-8)

- 1) Remove the Adjust P4
- 2) Remove the Sleeve P4.
- 3) Remove the Guide 17

#### 10. Pinch Gear(Fig. B-10-1, B-10-2)

- 1) Remove the Loading Motor Assembly.
- Remove one Nut(A) and then remove the Dew Bracket (Fig. B-5).
- 3) Remove the Pinch Lever Assembly by lifting it up(Fig. B-5)
- 4) Keep the Pinch Gear turned in the clockwise direction (180°)
- 5) Remove the Take-Up Lever by pushing the hook(A) outward(Fig. B-7).
- 6) Keep the Pinch Gear turned in the counterclockwise direction (180°).
- 7) Remove the Pinch Gear Assembly.





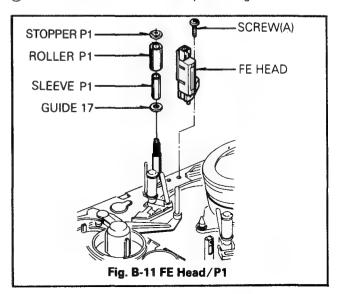
#### · NOTE

- 1) When reassembling, align the hole(A) of Pinch Gear with the hole of chassis, and the hole(C) of Pinch Gear with the groove(D) of the P C.Gear. Hole(E) of chassis should be aligned with the hole of P.C Gear.
- 2) Be sure to replace together Take-Up Lever and Pinch Gear.
- Be sure to assemble Pinch Lever Assembly before operating.

## 11. FE(Full Erase) Head Assembly(Fig. B-11) (Optional Item)

- 1) Unplug the connector
- 2) Remove one screw(A), and then remove the FE Head

- 1) When disassembling and reassembling
- 1 Do not touch the Video Head Tip with fingers or tools



## 12. P1 Assembly(Fig. B-11)

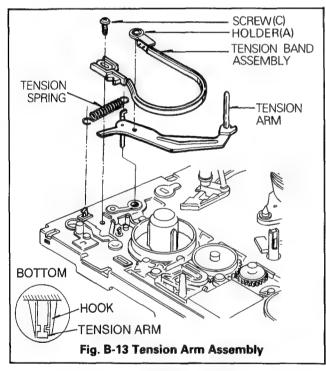
- 1) Remove the Stopper P1.
- 2) Remove the Roller P1.
- 3) Remove the Sleeve P1.
- 4) Remove the Guide 17.

## 13. Tension Arm Assembly(Fig. B-13)

- 1) Remove one screw(C)
- 2) Remove the Tension Spring
- Remove the Tension Arm Assembly by pushing hooks outward with the Deck Mechanism Assembly turned over
- 4) Remove the Tension Band Assembly from the Tension Arm by pushing Hooks of Holder(A)

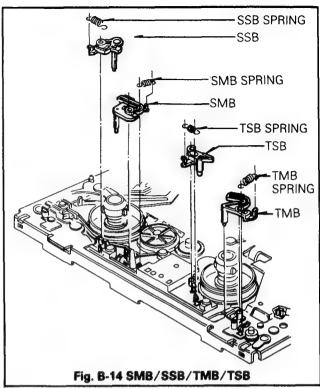
#### \* NOTE

 When disasembling and reassembling, give special attention to the disassembling and reassembling of Tension Arm Assembly, because the Tension Band is interposed between the Supply Reel and the Soft Brake.



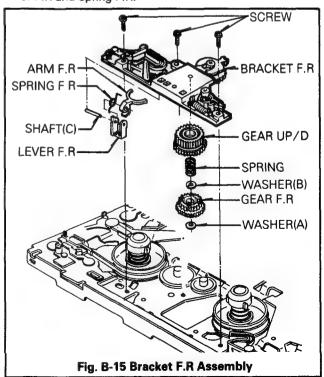
## 14. Supply Soft/Supply Main/Take-Up Soft/Take-Up Main Brake Assembly

- 1) Supply Soft Brake(SSB)
  - ① Remove the SSB Spring
  - 2 Remove the SSB.
- 2) Supply Main Brake(SMB)
  - ① Remove the SMB Spring
  - 2 Remove the SMB.
- 3) Take Up Soft Brake(TSB)
  - ① Remove the TSB Spring.
  - ② Remove the TSB.
- 4) Take-Up Main Brake(TMB)
  - ① Remove the TMB Spring
  - ② Remove the TMB.



## 15. Bracket F/R(FF/Rewind) Assembly (Fig. B-15)

- 1) Remove the TMB
- 2) Remove the Washer(A), and then remove the Gear F.R.
- Remove three screws, and then remove Bracket F/R Assembly from the Deck Mechanism Assembly
- 4) Remove the Washer(B), and spring Up/D, and then remove the Gear Up/D
- 5) Remove the shaft(C), and then remove the Arm F R, Lever F.R and Spring F.R.



## 16. Supply Reel Assembly(Fig. B-16)

- 1) Remove the Tension Band Assembly
- 2) Remove the Bracket F/R
- 3) Lift up the Supply Reel Assembly from the Deck Mechanism Assembly.

## 17. Take Up Reel Assembly(Fig. B-16)

- 1) Remove the TMB(Fig B-14)
- 2) Lift up the Take-up Reel Assembly from the Deck Mechanism Assembly

#### \* NOTE

- 1) When reassembling
- ① Make sure that the Supply and Take Up Reel are not exchanged.
- 2 After reinstalling the Supply Reel Assembly, Adjust the Tension

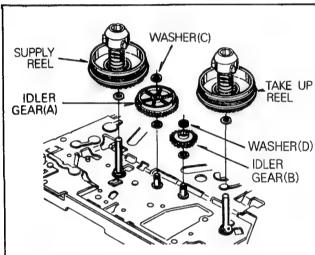


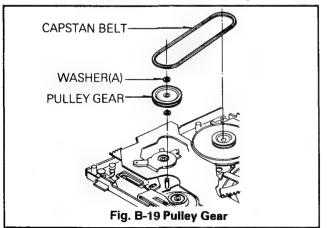
Fig. B-16 Supply Reel Assembly/Take-Up Reel Assembly

## 18. Idler Gear(A), (B)(Fig. B-16)

- 1) After removing the Supply Reel and supply Main Brake Assembly, remove the washer(C) and then remove the Idler Gear(A).
- 2) Remove the Washer(D) and remove the Idler Gear(B)

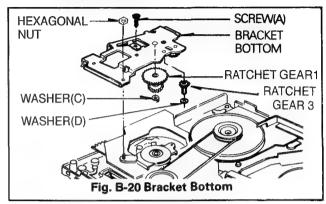
## 19. Pulley Gear Assembly (Fig. B-19)

- 1) Turn over the Deck Mechanism Assembly
- 2) Remove the Capstan Belt
- 3) Remove the Washer(A) and lift up the Pulley Gear.



## 20. Bracket Bottom Assembly (Fig. B-20)

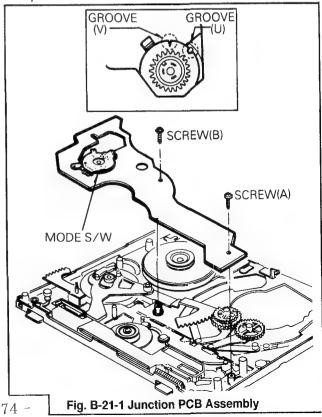
- 1) Remove one screw(A)
- 2) Remove one Hexagonal Nut, and then lift up the Bracket **Bottom Assembly**
- 3) Remove one Washer(C), and lift up the Ratchet Gear 1
- 4) Remove the washer(D), and then remove Ratchet Gear 3 from the Bracket Bottom.

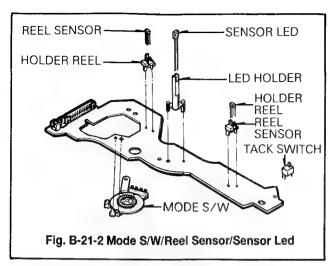


## 21. Junction PCB(Printed Circuit Board) Assembly(Fig. B-21-1)

- 1) Remove the Bracket Bottom Assembly.
- 2) Remove two screws(A), (B) and then remove the Junction P.C.B Assembly
- 3) Remove the Mode Switch from the Junction P.C.B. As-
- 4) Remove the Reel Sensor, Sensor LEDS and each holder from the Junction P.C.B(Fig. B-21-2).

1) When reassembling the Mode Switch, the groove(V) and (U) of Mode Switch should be at their original place in the Eiect Mode



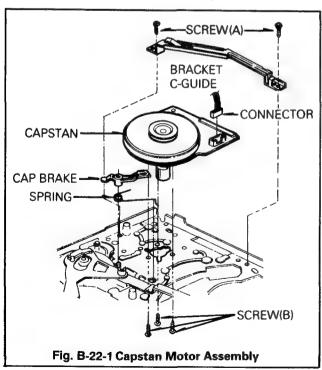


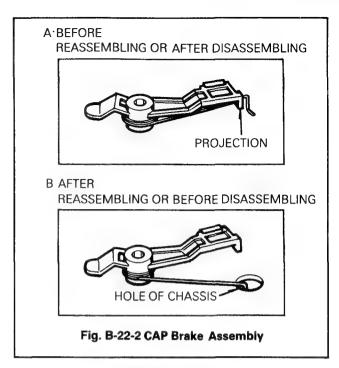
## 22. Capstan Motor and Brake Assembly (Fig. B-22-1)

- 1) Remove the Junction P C B Assembly
- Hook the end of Capstan Brake Spring to the projection of Capstan Brake and then remove the Capstan Brake Assembly by lifting it up(Fig B-22-2)
- 3) Remove two Screws(A), and then remove the Bracket C-Guide
- 4) Remove the Connector
- 5) Remove three screws(B), and then remove the Capstan Motor Assembly from the Deck Mechanism Assembly

#### \* NOTE

 When disassembling and reassembling, hook end of the spring on the projection of Cap-Brake and remove it by lifting it up Reassemble it in the opposite manner



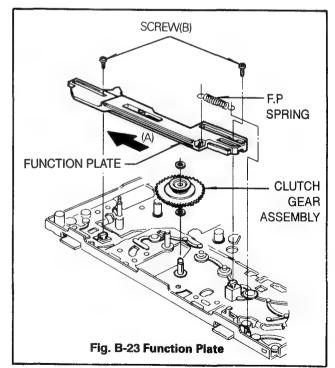


## 23. Function Plate(Fig. B-23)

- 1) Remove two screws(B) in Eject Mode.
- 2) Remove the Function Plate Spring
- 3) Push the Function Plate in the direction of arrow(A) and then lift it up.

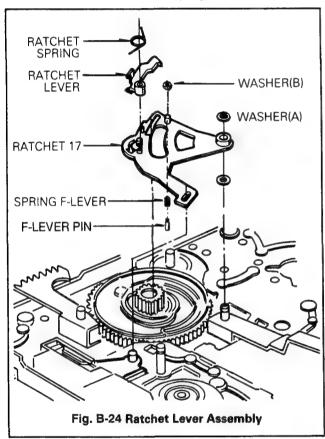
#### \* NOTE

 When reassembling the groove of Lower part of Function Plate should be aligned with the shaft of Tension Lever Assembly (Fig B-29)



## 24. Ratchet Lever Assembly(Fig. B-24)

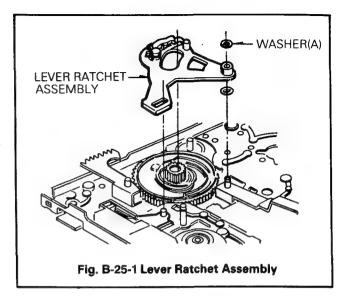
- 1) Remove the Function Plate
- 2) Remove the Junction P C B Assembly
- 3) Remove the Washer(A) and then remove the Ratchet Lever Assembly.
- 4) Remove the Ratchet Spring.
- 5) Remove the Ratchet Lever from the Ratchet 17 by lifting it up when the hook of it is aligned with the hole of Ratchet 17 while rotating it counterclockwise direction
- 6) Remove the Washer(B), and turn over the Ratchet 17 and then remove the F-Lever Pin, Spring F-Lever.

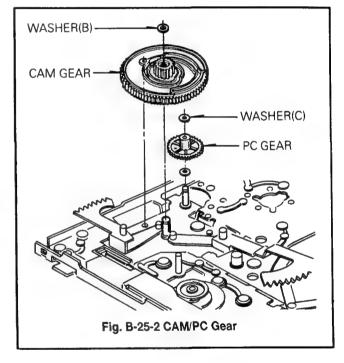


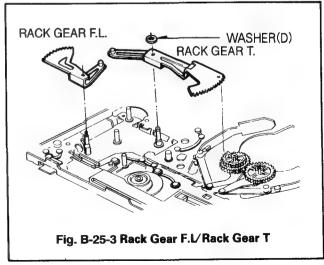
## 25. Cam Gear/Rack Gear T/Rack Gear FL(Fig. B-25-2)

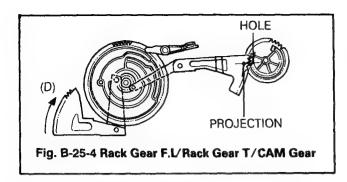
- Remove the washer(A) and remove the Ratchet Lever Assembly (Fig. B-25-1)
- 2) Remove the washer(B), and then remove the Cam Gear (Fig B-25-2)
- 3) Remove the Rack Gear F L (Fig B-25-3)
- 4) Remove the Washer(D).(Fig. B-25-3).
- 5) Remove the Rack Gear T.(Fig. B-25-3).

- 1) When reassembling
- Align the Projection of Rack Gear T with the hole of Loading Gear
- ② Drive the Rack Gear F.L in the direction of arrow(D).
- ③ Hole of Cam should be aligned with the hole of chassis, and the groove(■) of Cam Gear should be aligned with the hole of PC Gear (Fig B-26)







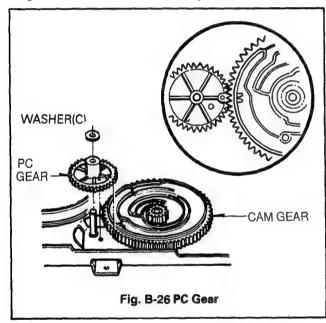


# 26. PC Gear(Fig. B-26)

- 1) Remove the washer(C)
- 2) Remove the P C Gear by lifting it up

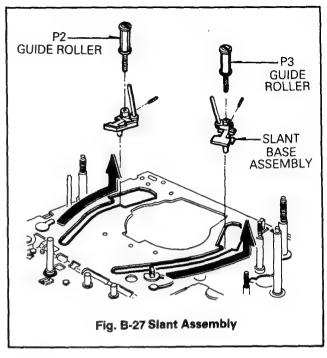
### \* NOTE

- 1) When reassembling
- The Groove of PC Gear should be aligned with the groove(V) of Cam Gear, and another hole of it should be aligned with the hole of chassis (Fig. B-26)



# 27. P2 and P3 Slant Assembly (Fig. B-27)

- After finishing the disassembly of Drum Assembly, remove the P2 and P3 Slant Assembly by turning the Loading Gear(R) in the clockwise direction. (Loading direction)
- 2) Loosen the set screws
- 3) Remove the Roller Guide from the Slant Base.



#### \* NOTE

- 1) When disassembling and reassembling
- (1) Use a Hexagonal wrench to remove set screw
- ② Take notice that the P2 and P3 Slant Assembly should not be changed from their original place.

# 28. Loading Gear Assembly(L),(R) (Fig. B-28)

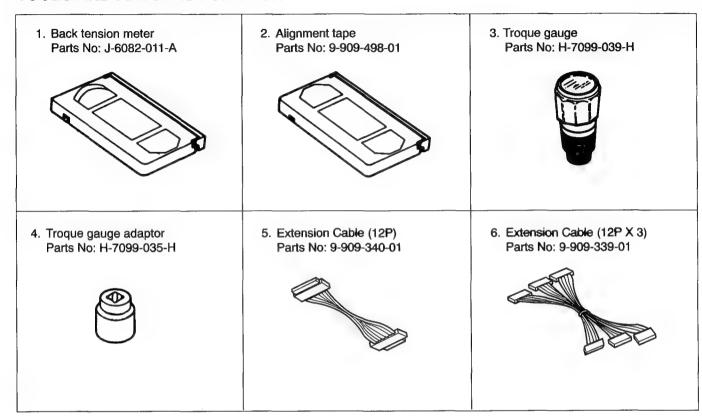
- 1) Remove the Cam Gear, Rack-T.
- Remove the P2 and P3 Slant Assembly by turning the Loading Gear(L),(R) in the Loading direction
- 3) Lift up the Loading Gear Assembly(L),(R) from the Deck Mechanism Assembly
- 4) Remove the Spring Load(L),(R)
- 5) Separate the Loading Gear(L), (R) from Arm Load(L), (R).

### \* NOTE

- 1) When reassembling
- Make sure that the Loading Gear(L) and (R) should not be changed from their original place.
- ② Align the groove of Loading Gear(L),(O) with the groove of Gear(R),(O)

# SECTION 10 MECHANISM ADJUSTMENT

# **TOOLS AND FIXTURES FOR DECK**



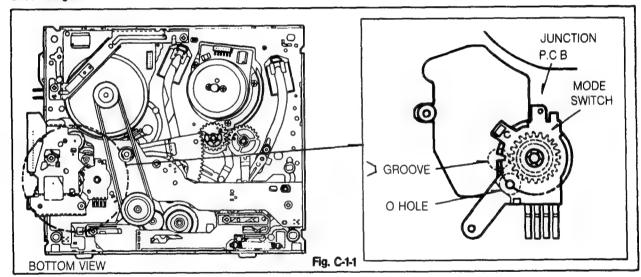
# 10-1. MECHANISM STATE SWITCH (MODE SWITCH) CHECK

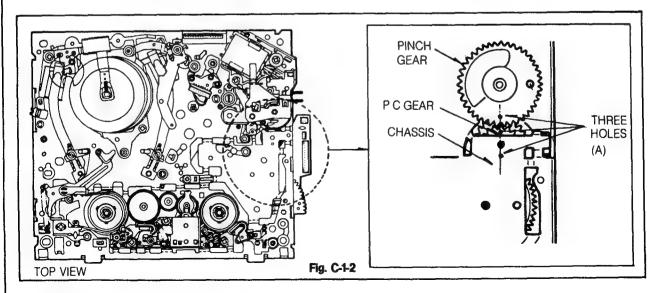
| Purpose: To detect accurately the mec        | nanism state and prevent the mechanism                   | from malfunction                                                     |
|----------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------------|
| Test Equipment/Fixture VCR State Check Point |                                                          |                                                                      |
| ●Blank tape                                  | <ul><li>Eject Mode<br/>(with cassette ejected)</li></ul> | <ul> <li>Mechanism state switch<br/>(Mode Switch and Cam)</li> </ul> |

### **Check Procedure**

- Turn the VCR on and eject the tape by pressing eject button
- Remove the Cabinet Top, the Main P C Board and the CST Housing. Then push the CST IN/OUT switch (Loca #137) and eject button at the same time.
- 3) Turn the worm (Loca #082) of Loading Motor Assembly (Loca #A10) to the left side (counterclockwise) to align the three holes (A) of the Pinch Gear, the P C Gear and the Chassis
- 4) Remove the Bottom Cover and then check that the groove (V) and the hole (O) of Mode S/W are aligned each other. If the above alignment is not obtained, adjust as follows
  - (1) Remove the Bracket Assembly Bottom and the Capstan Belt in the state of power off
  - (2) Remove the PCB Assembly, align the groove (V) and the hole (O) of Mode S/W each other and then reassemble the PCB Assembly
  - (3) Turn the power on and perform the various operations to check that the loading and the unloading are correct

### Check Diagram





# 10-2. PREPARATON FOR ADJUSTMENT (To set VCR to the loading state without inserting a cassette)

- 1) Unplug the power cord from the AC outlet
- 2) Remove the Cabinet Top and Front Loading mechanism.
- 3) Plug the power cord into the AC outlet
- Turn the VCR on and push the tact switch in the PCB Assembly.

The VCR can accept input of each mode in this case However the rewind and review operation cannot be performed for more than a few seconds because the take-up reel table is in the stop state and reel pulses cannot be detected

### (NOTE)

Always return the VCR to the Front Loading Mechanism Assembling State in the following order after the above operations have been performed

- 1) Press the Eject button after turning the power on
- 2) Wait for about 10 seconds until searching out the assembly position
- 3) Assemble the Front Loading Mechanism and connect the Front Loading Mechanism Connector
- Refer to the "Front Loading Mechanism Disassembly" which is described previously

### 10-3. REEL TABLE HEIGHT ADJUSTMENT

**Purpose:** To make the tension of tape constant so that the contact between the video heads and tape is stabilized

| O KISSINE SU                            |                                                    |                  |
|-----------------------------------------|----------------------------------------------------|------------------|
| Test Equipment/Fixture                  | VCR State                                          | Adjustment Point |
| ● Tension Meter<br>(Tension adjustment) | Play without cassette and with a     Tension Meter | Holder Band(B)   |

### **Adjustment Procedures**

(Position Adjustment)

- Perform loading without inserting a tape and loosen the screw that attaches the Holder Band(B) to the Deck Mechanism Assembly.
- 2) Insert the (-)type driver between the Holder Band(B) and the "V" groove of the chassis.
- Move the Holder Band(B) right and left and align the center of tension post(Guide T-Post) with the center of P1(Shaft P1).(tolerance:Less than ±0.3mm)
- Tighten the screw that attaches the Holder Band(B) to Deck Mechanism Assembly.

(Tension Adjustment)

- 1) Play the Tension Meter and read the Tension Meter: 38g•cm±4g•cm(reference value).
- 2) If the result is abnormal.
  - over the standard:loosen the screw, move the Holder Band(B) to the right a little and then tighten the screw and make sure that this adjustment is correct.

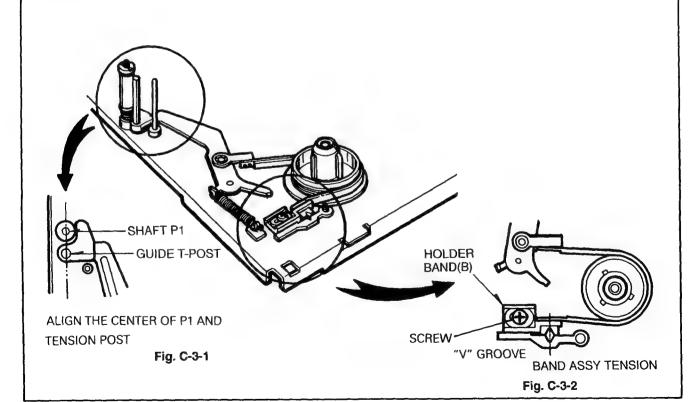
(2) below the standard:loosen the screw, move the Holder Band(B) to the left a little and then tighten the screw and make sure that this adjustment is correct.

### \*\*CAUTION\*\*

The range of movement of Holder Band(B) should be within ±1 5mm while being adjusted

If the range is over, you should recheck the Reel Brake, Tension Arm and Spring.

### **Adjustment Diagram**



## 10-4. CHECKING TORQUE

**Purpose:** It is necessary to check the tension, torque and compression force at the tape take-up section and moving section to make the tape run smoothly and satisfy the basic performance of the VCR Check these if the tape does not run smoothly or the tape speed is abnormal

| Test Equipment/Fixture  | VCR state                                                                |  |
|-------------------------|--------------------------------------------------------------------------|--|
| ● Torque Gauge          | <ul> <li>Set the VCR to each operation mode without inserting</li> </ul> |  |
| ■ Torque Gauge Adaptor  | a cassette                                                               |  |
| Cassette Torque Meter   | (See '2 Preparation for Adjustment')                                     |  |
| SRK-VHT-063 : Play, Cue |                                                                          |  |
| SRK-VHT-303 : Review    |                                                                          |  |

| Item                 | VCR Operation mode   | Measurement Reel         | Measurement Values |
|----------------------|----------------------|--------------------------|--------------------|
| Main brake torque,   | Eject                | Supply and take-up reels | 600g cm or more    |
| Slack removal torque | Unloading(power off) | Supply reel              | 120~220g·cm        |
| Fast forward torque  | Fast forward         | Take-up reel             | 600g·cm or more    |
| Rewind torque        | Rewind               | Supply reel              | 600g·cm or more    |
| Play take-up torque  | Play                 | Take-Up reel             | 90~150g·cm         |
| Review Torque        | Review               | Supply Reel              | 120~180 g.cm       |
| CUE Torque           | Cue                  | Take-Up Reel             | 110~170 g.cm       |

### **Checking Method**

The values are measured by using a torque gauge and torque gauge adaptor with the torque gauge fixed

Note: This value is measured when the VCR is shifted in the unloading direction from the fast forward or rewind mode and quick braking is applied to both Reel Tables

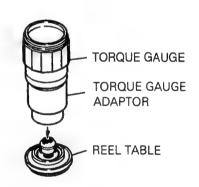


Fig. C-4

## 10-5. GUIDE ROLLER HEIGHT ADJUSTMENT

**Purpose:** To regulate the height of tape so that the bottom of tape runs along the tape guide line on the lower drum

## A. Preliminary Adjustment

| Test Equipment / Fixture                                                                                 | VCR State                | Adjustment Point                                                                                          |
|----------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------|
| <ul><li>Hexagonal Wrench or Bended</li><li>Drive (+) Type</li><li>Post Height Adjusting Driver</li></ul> | ● Play an alignment tape | <ul> <li>Guide Roller Height Adjustment<br/>Screws on the Supply and Take-Up<br/>Guide Rollers</li> </ul> |

## **Adjustment Procedure**

- 1) Perform the precise adjustment.
- 2) When the Guide Roller is damaged release the Guide Roller retaining screw and then replace the Guide Roller

# **Adjustment Diagram**



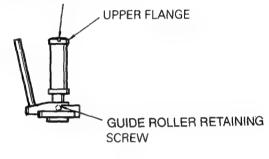


Fig. C-5-1

### 10-6. PRECISE ADJUSTMENT

| Test Equipment/Fixture                                                                                                            | Test Equipment<br>Connection Points                                                                                                  | VCR State                | Adjustment Point                          |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------------|
| <ul> <li>Oscilloscope</li> <li>Post Height Adjusting Driver</li> <li>Alignment Tape(30HMP-2)</li> <li>Hexagonal wrench</li> </ul> | ● CH-1 · PB RF Envelope<br>● CH-2 (NTSC : SW30Hz<br>\ PAL : SW25Hz<br>● Head Switching Output<br>Point<br>● RF Envelope Output Point | ● Play an alignment tape | Guide Roller Height     Adjustment Screws |

### **Adjustment Procedure**

- Play an alignment tape after connecting the probe of the oscilloscope to RF Envelope Output Test Point and Head Switching Output Test Point
- 2) Tracking control(in PB mode) Center position(When this adjustment is performed after the drum assembly has been replaced, set the tracking control so that the RF output is maximum)
- 3) Height adjustment screw Flatten the RF waveform
- 4) Turn(Move) the tracking control(playback) clockwise and counterclockwise (to the right and left)
- 5) Check that any drop of RF output is uniform at the start and end of the waveform.

### \*\*CAUTION\*\*

If the adjustment is excessive or insufficient the tape is jammed or folded.

### **Waveform Diagrams**

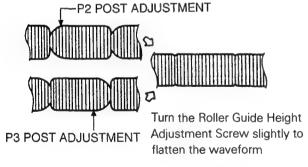
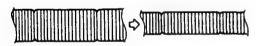


Fig. C-5-2

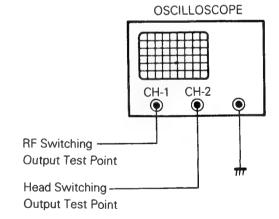


Tracking control at center

Turn(Move) the tracking control to both directions

Fig. C-5-3

### **Connection Diagram**



# 10-7. AUDIO/CONTROL (A/C) HEAD ADJUSTMENT

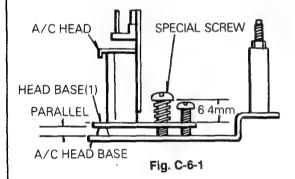
Purpose: To keep the contact between the tape and head so that the specificed track is recorded and played back

A. Preliminary Adjustment (Perform the preliminary adjustment, when there is no Audio Output signal with alignment tape.)

| Test Equipment/Fixture | VCR State          | Adjustment Points                                                                                      |
|------------------------|--------------------|--------------------------------------------------------------------------------------------------------|
| ● M3 Nut Driver        |                    | <ul><li>Special screw</li><li>Cone Point Screw for tilt</li><li>Azimuth Adjustment<br/>Screw</li></ul> |
| Blank tape             | Run the blank tape | ●A/C Head Adjuster                                                                                     |

## Adjustment procedure/Adjustment Diagram

 Tighten the special screw so that the spring section protrudes 6.4mm(approx.) over the top of Head Base (1).



 Turn the Azimuth Adjustment Screw and Cone Point Screw so that the Head Base(1) and A/C Head Base are parallel

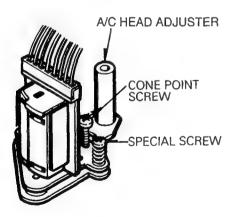
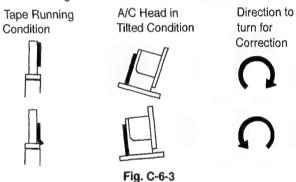


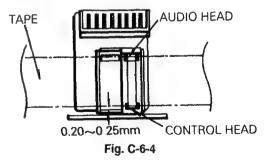
Fig. C-6-2

3) Load a blank tape and set the VCR to the play

- 4) Confirm that the tape runs fittingly to the lower limit of the P4 post. Also confirm that the tape runs smoothly.
- 5) If adjustment is required, turn Cone Point Screw clockwise until curling is apparent at the lower edge of P4. Then turn Cone Point Screw counterclockwise until the curling smooths out.



6) Check that there is no conspicuous curling and folding around the A/C head. If there is conspicuous curling or folding, readjust the Cone Point Screw, Azimuth Adjustment Screw and A/C Head Adjuster. When the bottom edge of tape is 0.20~0.25mm from the bottom edge of the control head's core, the height of A/C head is ideal.



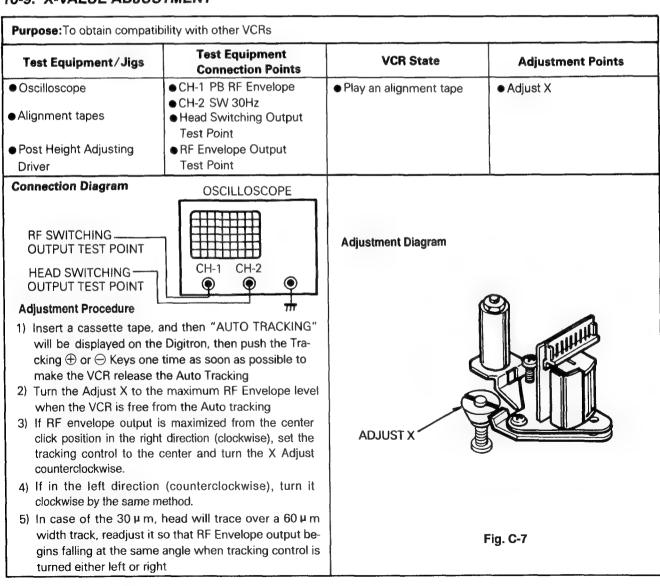
7) If necessary repeat steps 1 through 4 until a precise adjustment is achieved.

### 10-8. PRECISE ADJUSTMENT

| Test Equipment/Fixture                                                                                                     | Test Equipment Connection Point                                                                                                                                     | VCR State                                       | Adjustment Points                                                                             |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <ul><li>Oscilloscope</li><li>Alignment tapes</li><li>M3 Nut Driver</li></ul>                                               | ◆ Audio output jack                                                                                                                                                 | ● Play an alignment tape<br>1KHz, 7KHz sections | <ul><li>Azimuth Adjustment Screw</li><li>A/C Head adjuster</li><li>Cone point screw</li></ul> |
| jack 2) Adjust the Azimuth Adjuster and cone point so that an Audio 1KHz (minimum fluctuation). 3) Adjust the Azimuth Adju | scilloscope to audio output ustment Screw, A/C Head crew slightly and alternately output is maximum and flat.  stment Screw slightly and dio 7KHz output is maximum | Waveform Diagram  A Maximum                     | BB': Minimum                                                                                  |

Fig. C-6-5

### 10-9. X-VALUE ADJUSTMENT



# 10-10. ADJUSTMENT AFTER REPLACING DRUM ASSEMBLY (VIDEO HEADS)

| Test Equipment/Fixture                                                                                                                                                                                                                                                                                                                                                                                         | Test Equipment Connection Points                                                                                                  | VCR State                                                   | Adjustment Points                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <ul> <li>Oscilloscope</li> <li>Post Height Adjusting Driver</li> <li>Alignment tape</li> <li>Blank tape</li> <li>M3 Nut Driver</li> </ul>                                                                                                                                                                                                                                                                      | Checking the flatness  CH-1 PB RF Envelope  CH-2 (NTSC: SW30Hz PAL: SW25Hz  Head Switching Output Point  RF Envelope Output Point | ● Run the blank tape ■ Play an alignment tape               | <ul> <li>Guide Rollers Precise</li> <li>Adjustment</li> <li>Switching point</li> <li>Tracking point</li> <li>X-Value</li> </ul> |
| Connection Diagram                                                                                                                                                                                                                                                                                                                                                                                             | -                                                                                                                                 | Waveform Diagram                                            |                                                                                                                                 |
| RF SWITCHING ————————————————————————————————————                                                                                                                                                                                                                                                                                                                                                              | OSCILLOSCOPE  O O O                                                                                                               | V <sub>1</sub> V <sub>2</sub>                               |                                                                                                                                 |
| <ul> <li>Checking/Adjustment Procedure</li> <li>1) Run the blank tape, check and adjust whether the Roller Guide is curling or creasing tape around the Roller Guide</li> <li>2) Check the RF envelope output flatness and adjust the Roller Guide Height while playing an alignment tape</li> <li>3) Adjust the head switching point</li> <li>4) Check that RF envelope output is maximum when the</li> </ul> |                                                                                                                                   | V <sub>1</sub> /V MAX<br>V <sub>2</sub> /V MAX<br>RF ENVELC |                                                                                                                                 |
| •                                                                                                                                                                                                                                                                                                                                                                                                              | output is maximum when the                                                                                                        |                                                             |                                                                                                                                 |

# 10-11. CHECK OF TAPE TRAVEL AFTER REASSEMBLING DECK ASSEMBLY

Check Audio and RF Locking Time during playback after CUE or REV.

| Test Equipment/Fixture                                                                                                    | Specification                                                          | Test Equipment<br>Connection Point                                                 | VCR State                                                                          |
|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <ul> <li>Oscilloscope</li> <li>Alignment tape</li> <li>(with 6H 3kHz Color Bar<br/>Signal)</li> <li>Stop Watch</li> </ul> | RF Locking Time: Less than 5 sec. Audio Locking Time Less than 10 sec. | CH-1: PB RF Envelope CH-2: Audio Output RF Envelope Output Point Audio Output Jack | <ul> <li>Play an alignment tape<br/>(with 6H 3kHz Color Bar<br/>Signal)</li> </ul> |

# **Checking Procedure**

Adjust

- 1) Change the mode of CUE or REV to play
- 2) At this time, confirm that the Locking Time of Audio and RF Output Waveform fits to specification.
- 3) If the results checked above are abnormal, reapeat adjustments 4 through 8.

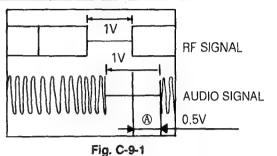
\* 6H: LP

### Check the coincidence of both Audio and Video Sync.(Lip Sync.)

| Test Equipment/Fixture                                                                                             | Specification    | Test Equipment Connection Point                                                    | VCR State                               |
|--------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------|-----------------------------------------|
| <ul> <li>Oscilloscope</li> <li>2H 9V Tape(for X-Value<br/>Adjustment Coincidence)<br/>or alignment tape</li> </ul> | ●Less than ±0.5V | CH-1: PB RF Envelope CH-2: Audio Output RF Envelope Output Point Audio Output Jack | Play a 2H 9V tape or an alignment tape. |

# **Checking Procedure**

- 1) Confirm that the period A of Fig. C-9-1 is within  $\pm$  0.5V.
- If the result is abnormal, repeat adjustment #7. (X-Value adjustment).



\* 2H . SP, V: Vertical

### Check the occurance of tape curl and jam

| Test Equipment/Fixture       | Specification                                                                                                                 | VCR State                                                                                   |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| ● T-160 Tape<br>● T-120 Tape | <ul> <li>Be sure there is no jam or curl at<br/>the beginning, the middle period or<br/>the end of the T-160 tape.</li> </ul> | <ul> <li>Run the CUE, REV play mode at the<br/>beginning and the end of the tape</li> </ul> |

### **Checking Procedure**

- Confirm whether the state of each transportation post is normal.
- Make sure nothing is wrong with the operation of the Counter, when the lower part of tape is folded.
- 3) Be sure there is nothing wrong in the Audio signal, when the upper part of tape is folded.
- 4) If the result is abnormal, repeat adjustment #5 and #6.

## Check the adjustment state of Take-Up Guide

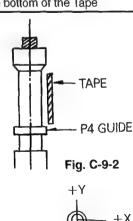
| Test Equipment/Fixture                                              | Specification                                                                                                                                                                                                          |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul><li>T-120 Tape</li><li>Take-Up Guide Adjusting Driver</li></ul> | <ul> <li>Review · Travel the tape that align the top of the P4 Guide and the bottom of the Tape or be folded.</li> <li>Play : Travel the tape that align the top of the P4 Guide and the bottom of the Tape</li> </ul> |

### **Checking Procedure**

- 1) Run the CUE or PLAY mode at the middle period or the end of the T-120 tape.
- 2) Run the REV mode at the play or cue part of tape.
- 3) At this time, confirm that the change of tape height at the P4 Guide fits to specification.
- 4) If the result is abnormal, refer to Table 9-1
- 5) Play the beginning of T-120 tape(within 5 min.)
- 6) Confirm that the state of tape transportation fit to specification in P4 Guide.
- 7) Remove the Tension Arm Assembly by rotating in the clockwise direction and then confirm that the state of tape transportation fit to specification.
- 8) If the result is abnormal, refer to Table 9-1

| PLAY Mode    | REV Mode     | Adjustment Method                   |
|--------------|--------------|-------------------------------------|
| Tape Falling | Tape Lift    | Bend the shaft of the direction +Y. |
| Tape Lift    | Tape Falling | Bend the shaft of the direction -Y. |

Table 9-1



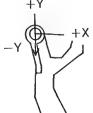


Fig. C-9-3

### 10-12. MAINTENANCE/INSPECTION PROCEDURE

### (1) Required Maintenance

The recording density of a VCR is much higher than that of an audio tape recorder. VCR components must be very precise, at tolerances of 1/1000mm, to ensure compatibility with other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, are necessary

### (2) Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR, and the environment in which the VCR is used

But, in general home use, a good picture will be maintained if the inspection and maintenance is made every 1,000hours. The table below shows the relation between time used and inspection period.

Table 1

| When inspection is necessary     | About 1<br>year | About 18 months | About 3 years |
|----------------------------------|-----------------|-----------------|---------------|
| Average<br>hours used<br>per day |                 |                 |               |
| One hour                         | ///////         | ///////         |               |
| Two hours                        | //////          |                 |               |
| Three hours                      | (////)          |                 |               |

### (3) Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit

Check with the customer to find out how often the unit is used, and then determine that the unit is ready for in spection and maintenance. Check the following parts

Table 2

| Phenomenon                  | Inspection                    |
|-----------------------------|-------------------------------|
| Poor S/N, no color          | Dirt on video head or         |
|                             | worn video head               |
| Tape does not run or tape   | Dirt on pressure roller, belt |
| is slack                    | or flywheel belt              |
| Vertical jitter, horizontal | Dirt on video head or in      |
| jitter                      | tape transport system         |
| Color beats                 | Dirt on full-erase head       |
| Low volume or sound         | Dirt on audio/control head    |
| distorted                   |                               |
| Fast forward or rewind is   | Dirt on belt                  |
| not done or rotation is     |                               |
| slow                        |                               |

### (4) Supplies Required for Inspection and Maintenance

- (1) Greases Kanto G-31(or equivalent)
- (2) Alcohol(Isopropyl Alcohol)
- (3) Cleaning Patches

#### 5) Maintenance Procedure

### 5-1) Cleaning

(1) Cleaning video head

First use a cleaning tape If dirt on head is too stubborn to remove by tape, use the cleaning patch Coat the cleaning patch with alcohol(Isopropyl Alcohol) to the point indicated. Touch the cleaning patch to the head tip and gently turn the head(rotating cylinder) right and left.

(Do not move the cleaning patch vertically and make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged)

Thoroughly dry the head. Then run test tape. If alcohol (Isopropyl Alcohol) remains on the video head, the tape may be damaged when it comes into contact with the head surface.

(2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with alcohol (Isopropyl Alcohol).

#### Note:

- ① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which move the tape.
- ② Make sure that during cleaning you do not touch the tape transport system with the tip of a screw driver and no force is applied to the system that would cause deforming

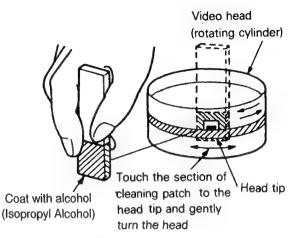


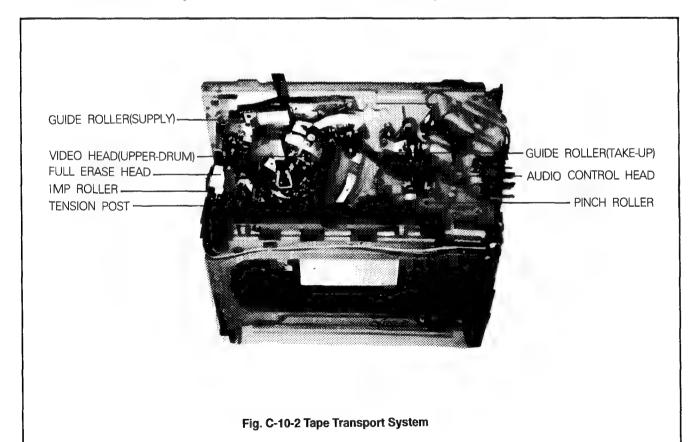
Fig. C-10-1

### 5-2) Greasing

(1) Greasing guidelines

Apply grease, with a cleaning patch. Do not use excess grease. It may come into contact with the tape transport of drive system. Wipe any excess and clean with cleaning patch wetted in alcohol(Isopropyl Alcohol).

(2) Periodic greasing
Grease specified locations every 5,000hours



| Phenomenon                         | Inspection                                       | Replace<br>ment |            |
|------------------------------------|--------------------------------------------------|-----------------|------------|
| Color beats                        | Dirt on full-erase head                          | 0               | <b>→</b> ① |
| Poor S/N no color                  | Dirt on video head                               | 0               | <b>→</b> ② |
| Vertical jitter                    | Dirt on video head Dirt in tape transport system | 0               | → ③        |
| Low volume,<br>Sound distorted     | Dirt on audio/control head                       | 0               | <b>→ ④</b> |
| Tape does not run<br>Tape is slack | Dirt on pinch roller                             | 0               | <b>→</b> ⑤ |

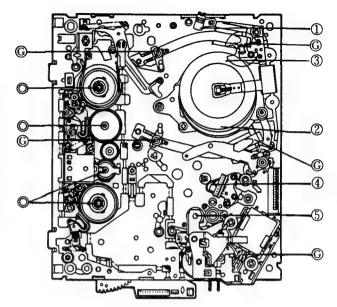


Fig. A-11 Top View of Mechanism

| or rewind, or rotation is slow  Tape does not run  Dirt on reel belt  O  → ⑥  C  → ⑥ | or rewind, or rotation is slow  Tape does not run  Dirt on reel belt  ○  →  ⑥  © | Phenomenon | Inspection Location | Replace ment | © O |  |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------|---------------------|--------------|-----|--|
| Slack tape                                                                           |                                                                                  |            | Dirt on reel belt   | 0            | 6 C |  |
|                                                                                      |                                                                                  | Slack tape |                     |              |     |  |

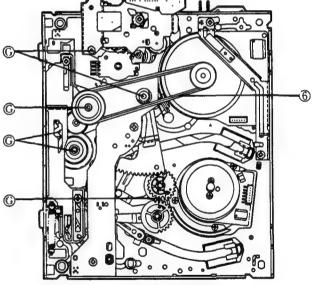


Fig. A-12 Bottom View of Mechanism

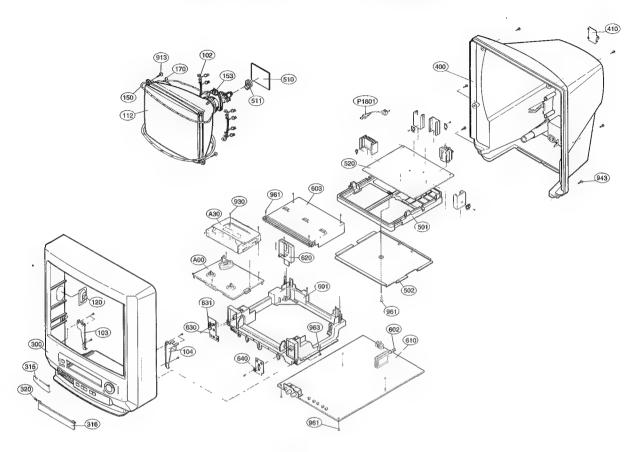
Note:If locations marked with O do not operate normally after cleaning, check for wear and replace.

See the EXPLODED VIEWS at the end of this manual as well as the above illustrations for the sections to be lubricated and greased.

@:Grease

(i):(i)

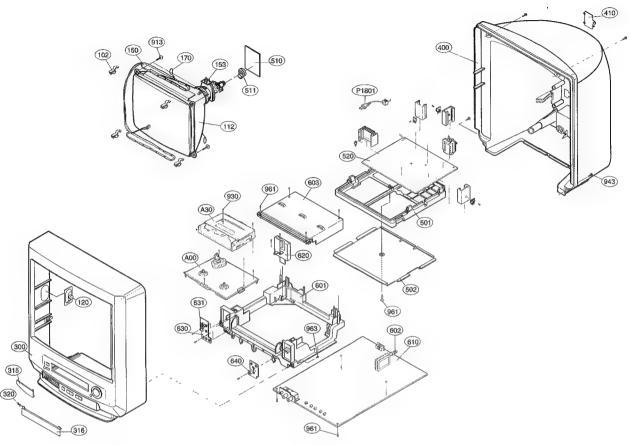
# SECTION 11 EXPLODED VIEW (KV-20VM30)



| REFNO | PART NO           | DESCRIPTION               | REMARK |
|-------|-------------------|---------------------------|--------|
| 102   | 9-909-865-01      | HOLDER,D-COIL             | i      |
| 103   | 9-939-424-01      | SUPPORTER, CPT (L)        | 1      |
| 104   | 9-939-425-01      | SUPPORTER, CPT (R)        | 1      |
| 833   | å sammen.         | PRITERETURE ASILEXISON    |        |
| 120   | 9-907-964-01      | SPEAKER                   | 1      |
| 150   | A 9 9 9 2 2 5 0 1 | CONLINECALISMO            |        |
| 25%   | 4-451-448-11      | DEFERCTION YOKE           |        |
| 170   | 9-909-857-01      | TENSION SPRING            | i      |
| 300   | 9-939-352-01      | CABINET ASSY KV-20VM30    |        |
| 315   | 9-939-353-01      | DOOR,CONTROL              |        |
| 316   | 9-939-354-01      | DOOR.CST                  |        |
| 320   | 9-907-944-01      | SPRING,COIL(FOR DOOR,CST) | į      |
| 400   | 9-939-355-01      | BACK COVER ASSY KV-20VM30 | )      |
| 410   | 9-939-356-01      | PLATE, POWER CORD         | 1      |
| 501   | 9-939-357-01      | D BRACKET                 |        |
| 502   | 9-939-422-01      | PLATE, SHIELD BOTTOM      | i      |
| 510   | 9-939-358-01      | C MOUNT                   | 1      |
|       |                   |                           | 1      |

| REFNO   | PART NO         | DESCRIPTION REMARK           |
|---------|-----------------|------------------------------|
| 511     | 9-909-869-01    | SOCKET PICTURE TUBE          |
| 520     | 9-939-359-01    | D MOUNT                      |
| 601     | 9-939-360-01    | VCR BRACKET                  |
| 602     | 9-939-361-01    | ADAPTER, CONNECTING ANT      |
| 603     | 9-939-362-01    | TOP COVER                    |
|         |                 |                              |
| 610     | 9-939-363-01    | MA MOUNT                     |
| 620     | 9-939-364-01    | RP MOUNT                     |
| 630     | 9-939-365-01    | MF LEFT MOUNT                |
| 640     | 9-939-367-01    | MF RIGHT MOUNT               |
| 913     | 9-909-864-01    | SCREW ASSY, HEXAGON HEAD     |
|         |                 |                              |
| 930     | 9-939-368-01    | SCREW MW+3*8                 |
| 943     | 9-909-480-01    | SCREW,PAN HEAD D4 L16        |
| 950     | 7-685-648-79    | SCREW,BRAZ WASH HD 3 0 L12 0 |
| 963     | 9-908-077-01    | SCREW,TRUSS HEAD D4 L16      |
| P1801 / | \$ 9-939-327-01 | CORD POWER                   |
|         |                 |                              |
| i       |                 |                              |

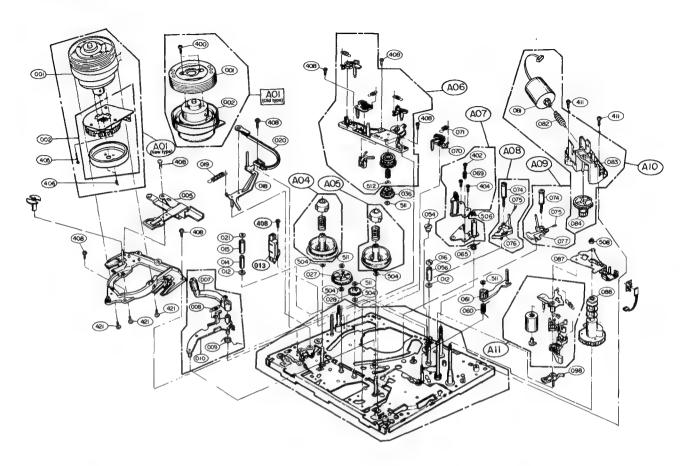
# EXPLODED VIEW (KV-13VM30/31)



| REFNO | PART NO      | DESCRIPTION                 | REMARK |
|-------|--------------|-----------------------------|--------|
| 102   | 9-908-964-01 | HOLDER D-COIL               |        |
| 100 A | 8-735-562-61 | PICTURE TUBE, A34/BUTEX     |        |
| 120   | 9-907-964-01 | SPEAKER                     |        |
| 188   | 9-907-962-01 | CYSLOSCAUSSING              |        |
| 100 4 | 8-451-418-11 | DEFLECTION YOU.             |        |
| 170   | 9-907-961-01 | TENSION SPRING              |        |
| 300   | 9-939-464-01 | CABINET ASSY KV-13VM30      |        |
| 300   | 9-939-465-01 | CABINET ASSY KV-13VM31      |        |
| 315   | 9-939-466-01 | DOOR, CONTROL KV-13VM30     |        |
| 315   | 9-939-467-01 | DOOR,CONTROL KV-13VM31      |        |
| 316   | 9-939-354-01 | DOOR,CST                    |        |
| 316   | 9-939-591-01 | DOOR,CST KV-13VM31          |        |
| 320   | 9-907-944-01 | SPRING,COIL(FOR DOOR,CST)   |        |
| 400   | 9-939-468-01 | BACK COVER ASSY KV-13VM30   |        |
| 400   | 9-939-469-01 | BACK COVER ASSY KV-13VM31   |        |
| 410   | 9-939-356-01 | PLATE, POWER CORD           |        |
| 410   | 9-939-470-01 | PLATE, POWER CORD KV-13VM31 |        |
| 501   | 9-939-357-01 | D BRACKET                   |        |
| 502   | 9-939-422-01 | PLATE, SHIELD BOTTOM        |        |
| 510   | 9-939-461-01 | C MOUNT                     |        |

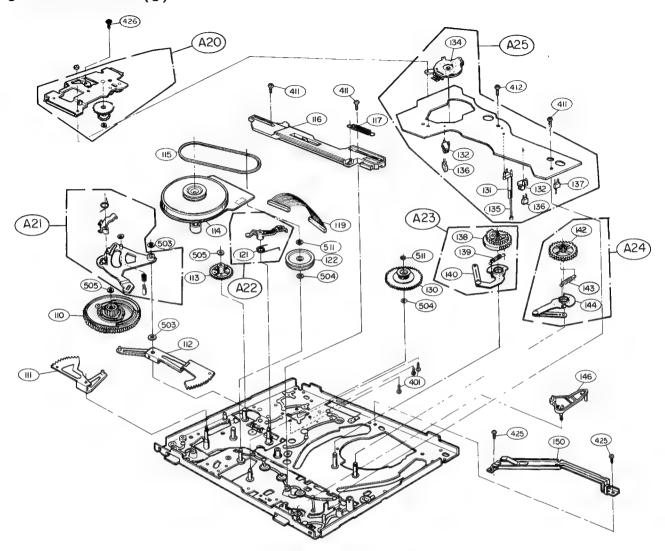
| REFNO   | PART NO                     | DESCRIPTION REMARK            |
|---------|-----------------------------|-------------------------------|
| 511     | 1-526-819-11                | SOCKET PICTURE TUBE           |
| 520     | 9-939-462-01                | D MOUNT                       |
| 601     | 9-939-360-01                | VCR BRACKET                   |
| 602     | 9-939-361-01                | ADAPTER, CONNECTING ANT       |
| 603     | 9-939-362-01                | TOP COVER                     |
| 610     | 9-939-463-01                | MA MOUNT                      |
| 620     | 9-939-364-01                | RP MOUNT                      |
| 630     | 9-939-365-01                | MF LEFT MOUNT                 |
| 640     | 9-939-367-01                | MF RIGHT MOUNT                |
| 913     | 9-908-080-01                | SCREW ASSY,HEXAGON HEAD       |
| 930     | 9-939-368-01                | SCREW MW+3*8                  |
| 943     | 9-909-480-01                | SCREW, PAN HEAD D4 L16        |
| 950     | 7-685-648-79                | SCREW, BRAZ WASH HD 3 0 L12 0 |
| 963     | 9-908-077-01                | SCREW,TRUSS HEAD D4 L16       |
| Y 800 4 | b 9-939-327-43              | COME, FORES                   |
| 91601   | \$ 6.039.390.0 <sub>1</sub> | CORD, POWER (WHITE)           |
|         |                             |                               |

# Moving Mechanism Section( I )



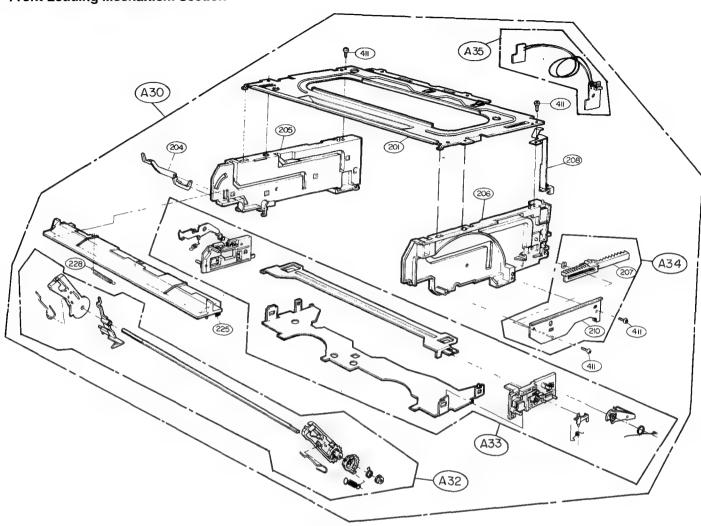
| REF NO | PART NO      | DESCRIPTION                | REMARK | REFNO | PART NO      | DESCRIPTION                   | REMARK |
|--------|--------------|----------------------------|--------|-------|--------------|-------------------------------|--------|
|        |              |                            |        |       |              |                               |        |
| A01    | 9-908-441-01 | DRUM ASSY GSA D-17 NTSC    |        | 060   | 9-908-369-01 | SPRING T/UP                   |        |
| A04    | 9-908-362-01 | REEL ASSY S17              |        | 061   | 9-908-293-01 | ARM ASSY T/UP                 |        |
| A05    | 9-908-288-01 | REEL ASSY T17              |        | 065   | 9-908-356-01 | SPRING A/C                    |        |
| A06    | 9-908-243-01 | BRACKET ASSY F/R           |        | 069   | 9-908-241-01 | SPRING AZIMUTH                |        |
| A07    | 9-908-228-01 | BASE ASSY A/C              |        | 070   | 9-908-338-01 | BRACK ASSY T-MAIN             |        |
|        |              |                            |        | 1     |              |                               |        |
| A08    | 9-908-202-01 | BASE ASSY,P2               |        | ! 071 | 9-908-380-01 | SPRING TMB                    |        |
| A09    | 9-908-196-01 | BASE ASSY,P3               |        | 074   | 9-908-198-01 | ROLLER ASSY, GUIDE            |        |
| A10    | 9-908-216-01 | MOTOR ASSY LOAD            |        | 075   | 9-908-199-01 | SCREW MINIATURE               |        |
| A11    | 9-908-313-01 | LEVER ASSY PINCH           |        | i 076 | 9-908-203-01 | BASE SUB ASSY, SLALT (L, W-W) |        |
| 001    | 9-939-417-01 | DRUM SUB ASSY              |        | 077   | 9-908-197-01 | BASE SUB ASSY, SLALT (R, W-W) |        |
|        |              |                            |        | 1     |              |                               |        |
| 002    | 9-908-442-01 | DRUM ASSY, LOWER (D17-2CH) |        | 081   | 9-908-224-01 | MOTOR SUB ASSY, L             |        |
| 005    | 9-908-341-01 | BASE ASSY D-BRUSH          |        | 082   | 9-908-221-01 | WORM ASSY                     |        |
| 007    | 9-908-388-01 | ARM SUB ASSY, CU           |        | 083   | 9-908-217-01 | BRACKET SUB ASSY L/M          |        |
| 008    | 9-908-395-01 | SPRING CU                  |        | 084   | 9-908-220-01 | WHEEL WORM                    |        |
| 009    | 9-908-394-01 | SPRING CL                  |        | 087   | 9-908-375-01 | BRACKET ASSY DEW              |        |
|        |              |                            |        | i     |              |                               |        |
| 010    | 9-908-387-01 | ARM CL                     |        | 088   | 9-908-374-01 | GEAR PINCH (N)                |        |
| 012    | 9-908-344-01 | GUIDE 17                   |        | 098   | 9-908-370-01 | LEVER T-UP (N)                |        |
| 013    | 9-908-343-01 | HEAD FE, HVFHF0010AK       |        | 400   | 9-908-503-01 | PAN HEAD MACHINE              |        |
| 014    | 9-908-345-01 | SLEEVE P1                  |        | 402   | 9-908-238-01 | SCREW SPECIAL                 |        |
| 015    | 9-908-346-01 | ROLLER P1                  |        | 404   | 9-908-239-01 | SCREW CONE POINT 3X10         |        |
|        |              |                            |        | 1     |              |                               |        |
| 016    | 9-908-382-01 | ADJUST P(4)                |        | 408   | 9-908-171-01 | BINDING HEAD MA               |        |
| 018    | 9-908-206-01 | ARM ASSY TENSION           |        | 411   | 9-908-163-01 | SCREW SPECIAL (3X12)          |        |
| 019    | 9-908-355-01 | SPRING TENSION             |        | 412   | 9-908-422-01 | BINDING HEAD MA               |        |
| 020    | 9-908-211-01 | BAND ASSY TENSION          |        | 421   | 9-908-413-01 | PAN HEAD MACHINE              |        |
| 021    | 9-908-348-01 | STOPPER P1                 |        | 504   | 9-908-434-01 | WASHER PS DE                  |        |
|        |              |                            |        |       |              |                               |        |
| 027    | 9-908-360-01 | GEAR IDLE (A) POM 3G       |        | 506   | 9-908-342-01 | NUT NYLON M3                  |        |
| 028    | 9-908-361-01 | GEAR IDLE (B) POM 3G       |        | 508   | 9-908-998-01 | NUT NYLON(M3)                 |        |
| 036    | 9-908-358-01 | GEAR F/R                   |        | 511   | 9-908-427-01 | WASHER STOPPER                |        |
| 054    | 9-908-357-01 | ADJUST X-ASSY              |        | 512   | 9-908-434-01 | WASHER STOPPER                |        |
| 056    | 9-908-353-01 | SLEEVE P4                  |        | 1     |              |                               |        |
| 400    |              | Daniel Co. C.              |        |       |              |                               |        |

# Moving Mechanism Section( ▮ )



| REFNO | PART NO      | DESCRIPTION                | REMARK | REFNO | PART NO      | DESCRIPTION                 | REMARK |
|-------|--------------|----------------------------|--------|-------|--------------|-----------------------------|--------|
| A20   | 9-908-325-01 | BRACKET ASSY BOTTOM        |        | 136   | 9-908-297-01 | SENSOR SG-105(REEL) D-16KOC |        |
| A21   | 9-908-281-01 | LEVER ASSY RAT             |        | 137   | 9-908-304-01 | SWITCH ESE-105SV1           |        |
| A22   | 9-908-276-01 | BRAKE ASSY CAP             |        | 138   | 9-908-180-01 | GEAR LOAD(R)                |        |
| A23   | 9-908-179-01 | ARM ASSY LOAD(R)           |        | 139   | 9-908-181-01 | SPRING LOADING              |        |
| A24   | 9-908-187-01 | ARM ASSY LOAD(L)           |        | 140   | 9-908-182-01 | ARM SUB ASSY                |        |
| A25   | 9-908-294-01 | PWB ASSY D-17,VCR          |        | 142   | 9-908-188-01 | GEAR LOAD(L)                |        |
| 110   | 9-908-381-01 | CAM D17                    |        | 143   | 9-908-189-01 | SPRING LOADING              |        |
| 111   | 9-908-337-01 | GEAR ASSY RACK F/L         |        | 144   | 9-908-190-01 | ARM SUB ASSY (L)            |        |
| 112   | 9-908-336-01 | GEAR ASSY RACK T           |        | 146   | 9-908-383-01 | LEVER ASSY A-TEN            |        |
| 113   | 9-908-379-01 | GEAR PC                    |        | 150   | 9-908-397-01 | BRACKET ASSY C-GUIDE        |        |
| 114   | 9-939-418-01 | MOTOR CAPSTAN GVC-017\$    |        | 400   | 9-908-503-01 | PAN HEAD MACHINE            |        |
| 115   | 9-908-354-01 | BELT CENTER                |        | 401   | 9-908-245-01 | PAN HEAD MACHINE            |        |
| 116   | 9-908-367-01 | PLATE F17                  |        | 411   | 9-908-163-01 | SCREW SPECIAL (3X12)        |        |
| 117   | 9-908-368-01 | SPRING FP                  |        | 412   | 9-908-422-01 | BINDING HEAD MA             |        |
| 121   | 9-908-280-01 | SPRING CAPSTAN             |        | 425   | 9-908-419-01 | BRAIZER HD TAP              |        |
| 122   | 9-908-359-01 | PULLEY GEAR POM 3G         |        | 426   | 9-908-420-01 | PAN HEAD MACHINE            |        |
| 130   | 9-908-269-01 | CLUTCH ASSY POM 7G FELT    |        | 503   | 9-908-426-01 | WASHER STOPPER              |        |
| 131   | 9-908-299-01 | HOLDER LED(Q)              |        | 504   | 9-908-434-01 | WASHER P.S D3               |        |
| 132   | 9-908-298-01 | HOLDER                     |        | 505   | 9-908-434-01 | WASHER STOPPER              |        |
| 134   | 9-908-300-01 | SWITCH MODE                |        | 511   | 9-908-427-01 | WASHER STOPPER              |        |
| 135   | 9-908-302-01 | DIODE LED IR SENSOR EL-55L |        | 512   | 9-908-434-01 | WASHER STOPPER              |        |

# Front Loading Mechanism Section



| REFNO | PART NO      | DESCRIPTION          | REMARK | REFNO | PART NO      | DESCRIPTION          | REMARK |
|-------|--------------|----------------------|--------|-------|--------------|----------------------|--------|
| A30   | 9-908-123-01 | HOUSING ASSY         |        | 205   | 9-908-124-01 | BRACKET LEFT (D17)   |        |
| A32   | 9-908-142-01 | GEAR ASSY DRIVE      |        | 206   | 9-908-125-01 | BRACKET RIGHT (D17)  |        |
| A33   | 9-908-130-01 | BRACKET ASSY CARRIER |        | 207   | 9-908-167-01 | GEAR RACK N/D        |        |
| A34   | 9-908-164-01 | BRACKET ASSY SIDE    |        | 208   | 9-908-126-01 | PLATE GND TOP        |        |
| A35   | 9-909-882-01 | PWB ASSY SENSOR      |        | 210   | 9-908-165-01 | BRACKET SIDE         |        |
|       |              |                      |        | i     |              |                      |        |
| 201   | 9-908-129-01 | PLATE TOP            |        | 225   | 9-908-127-01 | GUIDE CST            |        |
| 204   | 9-908-153-01 | OPENER DOOR          |        | 228   | 9-908-128-01 | SPRING S/W           |        |
|       |              |                      |        | 411   | 9-908-163-01 | SCREW SPECIAL (3X12) |        |

# SECTION 12 ELECTRICAL PARTS LIST

### NOTE

The components identified by shading and mark  $\triangle$  are critical for safety
Replace only with part number

Replace only with part number specified

Les composants identifies par une frame et une marque  $\triangle$  sont critiques pour la securite Ne les remplacer que piece portant le numero specifie

- Items marked '\*' are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve ß unless otherwise noted

#### -----

- RESISTORS

   All resistors are in ohms
- F: nonflammable

When indicating parts by reference number, please include the board name  $\,$ 

#### CAPACITORS

COILS

MF: μF, PF: μμF

UH, μH

| REF NO         | PART NO                                       | DESCRIPTION                      | REMARK                         | REF NO     | PART NO                      | DESCRIPTION                      | REMARK                     |
|----------------|-----------------------------------------------|----------------------------------|--------------------------------|------------|------------------------------|----------------------------------|----------------------------|
|                | * 9-939                                       | 463-01 MA MOUNT COMPLE           | TE (13V)                       | C1401      | 1-162-217-31                 | C,TUBULA(TC)                     | 56PF 50V J                 |
|                |                                               | 363-01 MA MOUNT COMPLE           |                                | (20V)      | 1-162-201-31                 | C,TUBULA(TC)                     | 12PF 50V J                 |
|                | 7-737-                                        |                                  | ,                              | C1402      | 1-126-963-11                 | C,ELECTROLYTIC                   | 4 7UF STD 50V M            |
|                | * * * * * * * * * * * * * * * * * * * *       |                                  |                                |            | 1-126-963-11                 | C.ELECTROLYTIC                   | 4 7UF STD 50V M            |
|                |                                               |                                  |                                |            | 1-126-967-11                 | C,ELECTROLYTIC                   | 47UF STD 16V M             |
|                |                                               | <capacitor></capacitor>          |                                | 1          |                              | ,                                |                            |
|                | 9-939-278-01                                  | CONNECTOR ASSY 3P (L=            | -400)FOR SPEAKER               | C1501      | 1-162-279-31                 | C,TUBULA(HIGH DIELE)             | 75PF 50V K                 |
| C101           | 1-162-294-31                                  | C,TUBULA(HIGH DIELE)             | 1000PF 50V K                   | C1507      | 1-126-964-11                 | C,ELECTROLYTIC                   | 10UF STD 16V M             |
| C1101          | 1-162-306-11                                  | C,TUBULA(HIGH DIELE)             | 0 01MF 16V M                   | C1508      | 1-124-499-11                 | C,ELECTROLYTIC                   | 1UF SRE 50V M              |
| C1102          | 1-162-306-11                                  | C,TUBULA(HIGH DIELE)             | 0 01MF 16V M                   | C1509      | 1-126-964-11                 | C,ELECTROLYTIC                   | 10UF STD 16V M             |
| C1103          | 1-101-004-00                                  | C,CERAMIC(HIGH DIELE)            |                                | C16        | 1-162-286-31                 | C,TUBULA(HIGH DIELE)             | 220PF 50V K                |
| 01100          | 1 101 00 1 00                                 | (11011 2122)                     | 0011111 307 23                 | 01.001     | 1 100 005 11                 | C DI ECONDOLLEMA                 | 47011E 0ED 14111           |
| C1107          | 1-106-351-00                                  | C,POLYESTER(MYLAR)               | 2200pF 50V J                   | C1601      | 1-126-935-11                 | C,ELECTROLYTIC                   | 470UF STD 16V M            |
| C1108          | 1-124-903-11                                  | C,ELECTROLYTIC                   | 1UF STD 50V M                  | C1602      | 9-939-588-01                 | C,ELECTROLYTIC                   | 330UF STD 16V M            |
| C1109          | 1-162-215-31                                  | C,TUBULA(TC)                     | 47PF 50V J                     | (20V)      | 1-126-933-11                 | C,ELECTROLYTIC                   | 100UF STD 16V M            |
| C1110          | 1-162-215-31                                  | C,TUBULA(TC)                     | 47PF 50V J                     | C1603      | 1-106-367-00                 | C,POLYESTER(MYLAR)               | 0 01U 100V K               |
| C1112          | 1-124-902-00                                  | C,ELECTROLYTIC                   | 0 47UF STD 50V M               | C1605      | 1-126-962-11                 | C,ELECTROLYTIC                   | 3 3UF STD 50V M            |
| C11115         | 1 100 007 11                                  | C DI DOMP OTTUNO                 | 40717 0000 401114              | C1606      | 1-126-942-61                 | C,ELECTROLYTIC                   | 1000UF STD 25V M           |
| C1115          | 1-126-967-11                                  | C,ELECTROLYTIC                   | 47UF STD 16V M                 | C1607      | 1-124-903-11                 | C,ELECTROLYTIC                   | 1UF STD 50V M              |
| C1119          | 1-106-375-12                                  | C,POLYESTER(MYLAR)               | 0 022MF 100V K                 | C1608      | 1-126-967-11                 | C,ELECTROLYTIC                   | 47UF STD 16V M             |
| C1120          | 9-939-279-01                                  | C,ELECTROLYTIC                   | 1MF 50V M                      | C1616      | 1-106-375-12                 | C,POLYESTER(MYLAR)               | 0 022MF 100V K             |
|                | C1121 1-162-217-31 C,TUBULA(TC)               |                                  | 56P 50V J                      | C1627      | 1-106-371-00                 | C,POLYESTER(MYLAR)               | 0 015MF 100V K             |
| C1128          | 1128 1-126-963-11 C,ELECTROLYTIC 4 7UF STD 50 |                                  | 4 7UF STD 50V M                |            |                              |                                  |                            |
| C1131          | 1-162-197-31                                  | C,TUBULA(TC)                     | 6 8P 50V K                     | C1701      | 1-124-347-00                 | C,ELECTROLYTIC                   | 100M SM 160V M             |
| C1137          | 1-124-902-00                                  | C,ELECTROLYTIC                   | 0 47UF STD 50V M               | C18        | 1-126-786-11                 | C,ELECTROLYTIC                   | 47UF 16V M                 |
| C1144          | 1-124-903-11                                  | C,ELECTROLYTIC                   | 1UF STD 50V M                  | C21        | 1-162-306-11                 | C,TUBULA(HIGH DIELE)             | 0 01MF 16V M               |
| C1145          | 9-939-389-01                                  | C.ELECTROLYTIC                   | 1000UF STD 10V M               | C213       | 1-126-157-11                 | C,ELECTROLYTIC                   | 10UF 16V M                 |
| C1152          | 9-939-291-01                                  | C,POLYESTER(MYLAR)               | 0 1UF S 50V J                  | C22        | 1-124-499-11                 | C,ELECTROLYTIC                   | IUF SRE 50V M              |
|                |                                               |                                  |                                | C220       | 1-126-786-11                 | C,ELECTROLYTIC                   | 47UF 16V M                 |
| C1153          | 1-126-768-11                                  | C,ELECTROLYTIC                   | 2200UF STD 16V M               | C221       | 1-126-157-11                 | C,ELECTROLYTIC                   | 10UF 16V M                 |
| C1155          | 1-126-933-11                                  | C,ELECTROLYTIC                   | 100UF STD 16V M                | C223       | 1-126-157-11                 | C,ELECTROLYTIC                   | 10UF 16V M                 |
| C1202          | 1-124-903-11                                  | C,ELECTROLYTIC                   | 1UF STD 50V M                  | C224       | 1-162-306-11                 | C,TUBULA(HIGH DIELE)             | 0.01MF 16V M               |
| C1206          | 1-124-903-11                                  | C,ELECTROLYTIC                   | 1UF STD 50V M                  | C225       | 1-126-964-11                 | C,ELECTROLYTIC                   | 10UF STD 16V M             |
| C1207          | 1-124-903-11                                  | C,ELECTROLYTIC                   | 1UF STD 50V M                  | i          |                              | ,                                |                            |
| C1208          | 1-162-306-11                                  | CTUDIU ACHOH DIDI DA             | O O I ME LOV. M                | C227       | 1-126-157-11                 | C,ELECTROLYTIC                   | 10UF 16V M                 |
| C1208          | 1-162-306-11                                  | C,TUBULA(HIGH DIELE)             | 0 01MF 16V M                   | C229       | 1-126-157-11                 | C,ELECTROLYTIC                   | 10UF 16V M                 |
|                | 1-126-934-11                                  | C,ELECTROLYTIC                   | 2200UF STD 16V M               | C23        | 1-162-306-11                 | C,TUBULA(HIGH DIELE)             | 0 01MF 16V M               |
| (20V)<br>C1210 | 1-124-903-11                                  | C,ELECTROLYTIC<br>C,ELECTROLYTIC | 220UF STD 16V M                | C230       | 1-126-157-11                 | C,ELECTROLYTIC                   | 10UF 16V M                 |
| C1210          | 1-124-903-11                                  | C,ELECTROLYTIC                   | 1UF STD 50V M<br>1UF STD 50V M | C26        | 1-162-306-11                 | C,TUBULA(HIGH DIELE)             | 0 01MF 16V M               |
| CIZIZ          | 1-124-903-11                                  | C,ELECTROLITIC                   | 10L 21D 20A M                  | . 007      | 1 162 206 11                 | CENTRAL AUGUSTON                 | 0.011/15 1/1/1/1           |
| C1213          | 1-124-903-11                                  | C,ELECTROLYTIC                   | 1UF STD 50V M                  | C27        | 1-162-306-11                 | C,TUBULA(HIGH DIELE)             | 0 01MF 16V M               |
| C1214          | 1-124-903-11                                  | C.ELECTROLYTIC                   | 1UF STD 50V M                  | C28<br>C29 | 1-162-306-11                 | C,TUBULA(HIGH DIELE)             | 0 01MF 16V M               |
| C1217          | 1-124-903-11                                  | C,ELECTROLYTIC                   | 1UF STD 50V M                  | C29        | 1-126-786-11<br>1-126-786-11 | C,ELECTROLYTIC                   | 47UF 16V M                 |
| C1219          | 1-126-934-11                                  | C,ELECTROLYTIC                   | 220UF STD 16V M                | C31        | 1-120-780-11                 | C,ELECTROLYTIC<br>C,ELECTROLYTIC | 47UF 16V M<br>0 47UF 50V M |
| C1220          | 1-126-157-11                                  | C,ELECTROLYTIC                   | 10UF 16V M                     | 1 032      | 1-124-403-00                 | C,ELECTRULITIC                   | 04/UF 30V W                |
|                |                                               |                                  |                                | C33        | 9-939-394-01                 | C,GOLD CAP                       | 47000MF/5 5V K             |
| (20V)          | 1-126-794-11                                  | C,ELECTROLYTIC                   | 4 7UF 50V M                    | C37        | 1-162-306-11                 | C,TUBULA(HIGH DIELE)             | 001MF 16V M                |
| C1251          | 1-104-792-51                                  | C,ELECTROLYTIC                   | 33UF 16V M                     | C38        | 1-162-306-11                 | C,TUBULA(HIGH DIELE)             | 001MF 16V M                |
| C13            | 1-102-959-00                                  | C,CERAMIC(TEMP COMP)             |                                | C40        | 1-162-294-31                 | C,TUBULA(HIGH DIELE)             | 1000PF 50V K               |
| C14            | 1-102-959-00                                  | C,CERAMIC(TEMP COMP)             | 22P 50V J                      | C402       | 1-126-786-11                 | C,ELECTROLYTIC                   | 47UF 16V M                 |
|                |                                               |                                  |                                | 1          |                              |                                  |                            |

| REF NO       | PART NO                      | DESCRIPTION                        | REMARK                        | REF NO       | PART NO                      | DESCRIPTION                         | REMARK                            |
|--------------|------------------------------|------------------------------------|-------------------------------|--------------|------------------------------|-------------------------------------|-----------------------------------|
| C405         | 1-161-494-00                 | C,TUBULA(HIGH DIELE)               | 22000P 25V Z F                | C601         | 1-126-967-11                 | C.ELECTROLYTIC                      | 47UF STD 16V M                    |
| C407         | 1-162-285-31                 | C,TUBULA(HIGH DIELE)               | 180PF 50V K                   | C602         | 1-106-367-00                 | C,POLYESTER(MYLAF                   | (S) 0 01U 100V K                  |
| C409         | 9-939-289-01                 | C,TUBULA(HIGH DIELE)               | 0 1M 50V Z                    | C603         | 1-106-367-00                 | C,POLYESTER(MYLAF                   |                                   |
| C41          | 1-162-294-31                 | C,TUBULA(HIGH DIELE)               | 1000PF 50V K                  | C604         | 1-106-363-00                 | C.POLYESTER(MYLAR                   |                                   |
| C411         | 1-126-786-11                 | C,ELECTROLYTIC                     | 47UF 16V M                    |              |                              |                                     |                                   |
|              |                              |                                    |                               | C605         | 1-106-375-12                 | C,POLYESTER(MYLAF                   | R) 0 022MF 100V K                 |
| C413         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    | C606         | 1-108-702-11                 | C,POLYESTER(MYLAF                   | R) 0 068U 100V K                  |
| C416         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    | C607         | 1-126-963-11                 | C,ELECTROLYTIC                      | 4 7UF STD 50V M                   |
| C417         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    | C608         | 1-124-903-11                 | C,ELECTROLYTIC                      | 1UF STD 50V M                     |
| C420         | 1-126-301-11                 | C,ELECTROLYTIC                     | 1UF 50V M                     | C609         | 1-126-963-11                 | C,ELECTROLYTIC                      | 4 7UF STD 50V M                   |
| C424         | 1-106-375-12                 | C,POLYESTER                        | 0 022UF 100V K                |              |                              |                                     | TO BEAUTY TONE IT                 |
|              |                              |                                    | 101177 161134                 | C610         | 1-162-286-31                 | C,TUBULA(HIGH DIEI                  |                                   |
| C425         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    | C611         | 1-124-903-11                 | C,ELECTROLYTIC                      | 1UF STD 50V M<br>47UF STD 16V M   |
| C426         | 1-126-786-11                 | C,ELECTROLYTIC                     | 47UF 16V M                    | C613         | 1-126-967-11                 | C,ELECTROLYTIC                      |                                   |
| C428         | 1-130-491-00                 | C,POLYESTER<br>C,ELECTROLYTIC      | 0 047MF 50V K<br>0 47UF 50V M | C614         | 1-106-345-00                 | C,POLYESTER(MYLAI<br>C,ELECTROLYTIC | 22UF STD 16V M                    |
| C429<br>C431 | 1-124-465-00<br>1-161-494-00 | C,TUBULA(HIGH DIELE)               | 22000P 25V Z F                | C619         | 1-128-551-11                 | C,ELECTROLITIC                      | 2201 310 100 101                  |
| C431         | 1-101-494-00                 | C, TOBOLA (INOTI DIELE)            | 220001 23 4 2/1               | C632         | 1-137-401-11                 | C,METALPOLYESTER                    | 0 22MF 50V J                      |
| C432         | 1-130-483-00                 | C,POLYESTER                        | 0 01UF 50V K                  | C634         | 1-126-935-11                 | C,ELECTROLYTIC                      | 470UF STD 16V M                   |
| C433         | 1-126-301-11                 | C.ELECTROLYTIC                     | 1UF 50V M                     | C636         | 1-106-343-00                 | C.POLYESTER(MYLAI                   |                                   |
| C434         | 1-126-301-11                 | C,ELECTROLYTIC                     | 1UF 50V M                     | C637         | 1-106-367-00                 | C,POLYESTER(MYLA)                   |                                   |
| C436         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    | C638         | 1-126-963-11                 | C,ELECTROLYTIC                      | 4 7UF STD 50V M                   |
| C437         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    |              |                              |                                     |                                   |
|              |                              |                                    |                               | C639         | 1-126-964-11                 | C,ELECTROLYTIC                      | 10UF STD 16V M                    |
| C44          | 1-126-786-11                 | C,ELECTROLYTIC                     | 47UF 16V M                    | C640         | 1-126-964-11                 | C,ELECTROLYTIC                      | 10UF STD 16V M                    |
| C443         | 1-126-786-11                 | C,ELECTROLYTIC                     | 47UF 16V M                    | C801         | 1-126-157-11                 | C,ELECTROLYTIC                      | 10UF 16V M                        |
| C444         | 9-939-289-01                 | C,TUBULA(HIGH DIELE)               | 0 IM 50V Z                    | C805         | 1-126-786-11                 | C,ELECTROLYTIC                      | 47UF 16V M                        |
| C446         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    | C807         | 9-939-291-01                 | C,POLYESTER(MYLA                    | R) 0 1UF S 50V J                  |
| C447         | 1-162-306-11                 | C,TUBULA(HIGH DIELE)               | 001MF 16V M                   | 1            |                              |                                     | 10175 163716                      |
|              |                              |                                    | 1000 FAT T                    | C808         | 1-126-157-11                 | C,ELECTROLYTIC                      | 10UF 16V M                        |
| C448         | 1-162-215-31                 | C,TUBULA(TC)                       | 47PF 50V J                    | C810         | 1-126-786-11                 | C,ELECTROLYTIC                      | 47UF 16V M                        |
| C450         | 1-126-786-11                 | C,ELECTROLYTIC                     | 47UF 16V M                    | C811         | 9-939-291-01                 | C,POLYESTER(MYLA                    | R) 0 1UF S 50V J<br>0 068MF 50V K |
| C451         | 1-102-942-00                 | C,CERAMIC(TEMP COMP) C,TUBULA(T C) | ) 5P 50V D<br>27PF 50V J      | C820         | 1-130-493-00                 | C,POLYESTER<br>C,POLYESTER(MYLA     |                                   |
| C453<br>C454 | 1-162-209-31<br>1-124-499-11 | C,ELECTROLYTIC                     | 1UF SRE 50V M                 | C821         | 1-106-363-00                 | C,POLIESTER(MILA                    | K) 000011 3 30 V 3                |
| C4J4         | 1-12                         | C,EEEETROETTIC                     | 101 0KD 30 V 141              | C841         | 1-126-786-11                 | C.ELECTROLYTIC                      | 47UF 16V M                        |
| C456         | 1-124-257-00                 | C,ELECTROLYTIC                     | 2 2UF 50V M                   | C843         | 1-126-301-11                 | C.ELECTROLYTIC                      | 1UF 50V M                         |
| C457         | 1-126-786-11                 | C,ELECTROLYTIC                     | 47UF 16V M                    | C844         | 9-939-396-01                 | C,CERAMIC(TEMP CO                   |                                   |
| C458         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    |              |                              |                                     |                                   |
| C459         | 9-939-289-01                 | C,TUBULA(HIGH DIELE)               | 0 1M 50V Z                    |              |                              | <diode></diode>                     |                                   |
| C460         | 9-939-289-01                 | C,TUBULA(HIGH DIELE)               | 0 1M 50V Z                    | D10          | 8-719-815-85                 | DIODE 1                             | S2471                             |
|              |                              |                                    |                               | D11          | 8-719-815-85                 | DIODE 1                             | S2471                             |
| C501         | 1-162-294-31                 | C,TUBULA(HIGH DIELE)               | 1000PF 50V K                  | D1202        | 8-719-300-33                 | DIODE                               | TVR06J 0 6A/600V 250NS            |
| C502         | 1-126-786-11                 | C,ELECTROLYTIC                     | 47UF 16V M                    | D1202        | 8-719-815-85                 |                                     | \$2471                            |
| C503         | 1-126-301-11                 | C,ELECTROLYTIC                     | 1UF 50V M                     | D1203        | 8-719-815-85                 |                                     | .S2471                            |
| C506         | 1-130-483-00                 | C,POLYESTER                        | 0 01UF 50V K                  | D1208        | 8-719-815-85                 | DIODE 1                             | S2471                             |
| C508         | 9-939-290-01                 | C,POLYESTER(MYLAR)                 | 0 033UF S 50V J               | 1 21000      | 0.710.015.05                 | DIODE 1                             | S2471                             |
| C509         | 1-126-301-11                 | C,ELECTROLYTIC                     | 1UF 50V M                     | D1205        | 8-719-815-85<br>8-719-815-85 |                                     | IS2471                            |
| C51          | 1-126-786-11                 | C.ELECTROLYTIC                     | 47UF 16V M                    | D21<br>D23   | 8-719-815-85                 |                                     | 182471                            |
| C51          | 1-162-294-31                 | C,TUBULA(HIGH DIELE)               | 1000PF 50V K                  | D401         | 8-719-815-85                 |                                     | 182471                            |
| C515         | 9-939-290-01                 | C,POLYESTER(MYLAR)                 | 0 033UF S 50V J               | D402         | 8-719-815-85                 |                                     | IS2471                            |
| C516         | 1-124-499-11                 | C,ELECTROLYTIC                     | 1UF SRE 50V M                 | 1            |                              |                                     |                                   |
|              |                              |                                    |                               | D403         | 8-719-815-85                 |                                     | IS2471                            |
| C517         | 1-130-483-00                 | C,POLYESTER                        | 0 01UF 50V K                  | D404         | 9-908-037-01                 |                                     | SCHOTTKY,BAT 41                   |
| C518         | 1-124-257-00                 | C,ELECTROLYTIC                     | 2 2UF 50V M                   | D405         | 8-719-815-85                 |                                     | 1\$2471                           |
| C519         | 1-124-257-00                 | C,ELECTROLYTIC                     | 2 2UF 50V M                   | D406         | 8-719-815-85                 |                                     | 182471                            |
| C521         | 1-124-463-00                 |                                    | 0 1UF 50V M                   | D407         | 8-719-815-85                 | DIODE                               | 1S2471                            |
| C523         | 1-126-794-11                 | C,ELECTROLYTIC                     | 4 7UF 50V M                   | l Deni       | 0 710 015 05                 | DIODE                               | 1\$2471                           |
|              |                              | A 11 TOWN CT                       | 101777 161137                 | D501<br>D502 | 8-719-815-85<br>8-719-815-85 |                                     | 1S2471                            |
| C524         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    | D502         | 8-719-815-85                 |                                     | 1S2471                            |
| C525         | 1-126-157-11                 | C,ELECTROLYTIC                     | 10UF 16V M                    | D506         | 8-719-815-85                 |                                     | 1S2471                            |
| C526         | 1-126-794-11                 | C,ELECTROLYTIC                     | 4 7UF 50V M<br>4 7UF 50V M    | D507         | 8-719-815-85                 |                                     | IS2471                            |
| C527         | 1-126-794-11                 | C,ELECTROLYTIC<br>C,POLYESTER      | 4 /UF 50V M<br>1000PF 50V K   |              |                              |                                     |                                   |
| C529         | 1-106-343-00                 | CFOLIESIER                         | TOULT JUV IV                  | D508         | 8-719-815-85                 |                                     | 1S2471                            |
| C530         | 1-104-792-51                 | C,ELECTROLYTIC                     | 33UF 16V M                    | D509         | 8-719-815-85                 |                                     | 1S2471                            |
| C532         | 1-126-514-11                 | C,ELECTROLYTIC                     | 22UF 16V M                    | D510         | 8-719-815-85                 |                                     | 1S2471                            |
| C532         | 1-162-306-11                 | C,TUBULA(HIGH DIELE)               |                               | D601         | 8-719-815-85                 |                                     | IS2471                            |
| C535         | 9-939-395-01                 |                                    | 0 4700UF SRE 50V M            | D602         | 8-719-815-85                 | DIODE                               | 1S2471                            |
| C537         | 1-106-351-00                 |                                    | 2200PF S 50V J                | D841         | 9-939-292-01                 | DIODE                               | DS4148                            |
|              |                              |                                    |                               | D841         | 9-939-292-01                 |                                     | DS4148                            |
| C538         | 1-124-465-00                 | C,ELECTROLYTIC                     | 0 47UF 50V M                  | D843         | 9-939-292-01                 |                                     | DS4148                            |
|              |                              |                                    |                               | 1 20.0       |                              |                                     |                                   |

| REF NO                              | PART NO                      | DESCRIPTION                                                                                                                                                | REMARK                                                                                  | REF NO       | PART NO                                 | DESCRIPTION                                | REMARK                                                 |
|-------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------|-----------------------------------------|--------------------------------------------|--------------------------------------------------------|
| D844                                | 8-719-815-85                 | DIODE                                                                                                                                                      | 182471                                                                                  | L204         | 1-410-513-11                            | INDUCTOR                                   | 22UH K                                                 |
| D845                                | 8-719-815-85                 | DIODE                                                                                                                                                      | 1S2471                                                                                  | L401         | 1-410-509-11                            | INDUCTOR                                   | 10UH K                                                 |
| D846                                | 8-719-815-85                 | DIODE                                                                                                                                                      | 1\$2471                                                                                 | LA02         | 1-410-518-11                            | INDUCTOR                                   | 56UH K                                                 |
| D847                                | 8-719-815-85                 | DIODE                                                                                                                                                      | 1S2471                                                                                  | L404         | 1-410-521-11                            | INDUCTOR                                   | 100UH K                                                |
| D848                                | 8-719-815-85                 | DIODE                                                                                                                                                      | 1\$2471                                                                                 | L405         | 1-410-514-11                            | INDUCTOR,                                  | 27UH K                                                 |
| D040                                | 0-719-015-05                 | DIODE                                                                                                                                                      | 1021/1                                                                                  | 1 1.403      | 1-410-314-11                            | INDUCTOR,                                  | 27011 K                                                |
| D849                                | 8-719-815-85                 | DIODE                                                                                                                                                      | 1S2471                                                                                  | L406         | 1-410-521-11                            | INDUCTOR                                   | 100UH K                                                |
| ZD11                                | 8-719-921-67                 | DIODE ZENER                                                                                                                                                | MTZ8 2B                                                                                 | L407         | 1-410-513-11                            | INDUCTOR                                   | 22UH K                                                 |
| ZD1101                              | 8-719-921-43                 | DIODE ZENER                                                                                                                                                | MTZ5 1B                                                                                 | L408         | 1-410-513-11                            | INDUCTOR                                   | 22UH K                                                 |
| ZD12                                | 8-719-921-82                 | DIODE ZENER                                                                                                                                                | Z12BM TA                                                                                | L409         | 1-410-513-11                            | INDUCTOR                                   | 22UH K                                                 |
| ZD1203                              | 8-719-921-69                 | DIODE ZENER                                                                                                                                                | MTZ9 1B                                                                                 | L410         | 1-410-515-11                            | INDUCTOR                                   | 33UH K                                                 |
| PT 10                               | 8 710 001 43                 | DIODE ZENED                                                                                                                                                | MT75 ID                                                                                 |              |                                         |                                            | 1011111                                                |
| ZD13                                | 8-719-921-43                 | DIODE ZENER                                                                                                                                                | MTZ5 1B                                                                                 | L411         | 1-410-512-11                            | INDUCTOR                                   | 18UH K                                                 |
| ZD14                                | 8-719-921-43                 | DIODE ZENER                                                                                                                                                | MTZ5 1B                                                                                 | L412         | 1-410-363-11                            | INDUCTOR                                   | 27UH K                                                 |
|                                     | 8-719-921-69                 | DIODE ZENER                                                                                                                                                | MTZ9 1B                                                                                 | L413         | 1-410-336-11                            | INDUCTOR                                   | 220UH K                                                |
|                                     | 8-719-109-97                 | DIODE ZENER                                                                                                                                                | MTZ6 8B                                                                                 | L501         | 1-410-514-11                            | INDUCTOR,                                  | 27UH K                                                 |
| ZD1405                              | 8-719-921-69                 | DIODE ZENER                                                                                                                                                | MTZ9 1B                                                                                 | L601         | 1-410-521-11                            | INDUCTOR                                   | 100UH K                                                |
| ZD1406                              | 8-719-921-69                 | DIODE ZENER                                                                                                                                                | MTZ9 1B                                                                                 | L602         | 1-410-513-11                            | INDUCTOR                                   | 22UH K                                                 |
|                                     | 8-719-921-43                 | DIODE ZENER                                                                                                                                                | MTZ5 1B                                                                                 | L603         | 1-410-521-11                            | INDUCTOR                                   | 100UH K                                                |
|                                     | 8-719-921-80                 | DIODE ZENER                                                                                                                                                | MTZ 11B                                                                                 | L605         | 1-410-511-11                            | INDUCTOR                                   | 15UH K                                                 |
|                                     | 8-719-921-80                 | DIODE ZENER                                                                                                                                                | MTZ 11B                                                                                 | 1            | 1-410-513-11                            |                                            | 22UH K                                                 |
|                                     |                              | DIODE ZENER                                                                                                                                                | MTZ 11B                                                                                 | L802         |                                         | INDUCTOR                                   |                                                        |
| 2,0203                              | 8-719-921-80                 | DIODE LENER                                                                                                                                                | m12 IIV                                                                                 | L805         | 1-410-506-11                            | INDUCTOR                                   | 5 6UH K                                                |
| ZD204                               | 8-719-921-80                 | DIODE ZENER                                                                                                                                                | MTZ 11B                                                                                 | L811         | 1-410-336-11                            | INDUCTOR                                   | 220UH K                                                |
| ZD205                               | 8-719-921-82                 | DIODE ZENER                                                                                                                                                | Z12BM TA                                                                                | L812         | 1-410-336-11                            | INDUCTOR                                   | 220UH K                                                |
| ZD206                               | 8-719-921-80                 | DIODE ZENER                                                                                                                                                | MTZ 11B                                                                                 | L813         | 1-410-336-11                            | INDUCTOR                                   | 220UH K                                                |
| ZD207                               | 8-719-921-80                 | DIODE ZENER                                                                                                                                                | MTZ 11B                                                                                 | L814         | 1-410-336-11                            | INDUCTOR                                   | 220UH K                                                |
| ZD24                                | 8-719-921-82                 | DIODE ZENER                                                                                                                                                | Z12BM TA                                                                                | T601         | 9-939-342-01                            | COIL                                       | VAR,07S 6F 252KHZ                                      |
|                                     |                              | <ic></ic>                                                                                                                                                  |                                                                                         | !            |                                         | <connec< th=""><th>CTOR&gt;</th></connec<> | CTOR>                                                  |
| IC10                                | 9-939-295-01                 | IC, MOTOROLA                                                                                                                                               | MC144110                                                                                | P01          | 9-939-400-01                            | CONNECTOR A                                | SSY 3P (L=150) TO MF-R P01-A                           |
| IC11                                | 9-939-296-01                 | IC, LG ELECTRON G                                                                                                                                          | L7445 10SIP BI-MOTOR DRIVER                                                             | P04          | 9-939-401-01                            |                                            | SSY 7P (L=200) TO MF-L P04-A                           |
| IC14                                | 9-939-298-01                 | IC,KEC KIA                                                                                                                                                 | 7033P 3P 3 3V RESET                                                                     | P11          | 9-939-324-01                            |                                            | SSY 15(3/12)P TO HC02/PD501                            |
| IC15                                | 8-759-251-04                 |                                                                                                                                                            | 4C02-10PC 8D EEPROM(2K,IIC)                                                             | P508         | 9-939-329-01                            |                                            | SSY 15P TO PJM01                                       |
| IC1501                              | 9-939-299-01                 | ·                                                                                                                                                          | 325AN 56SD NTSC 1 CHIP(MONO                                                             | 1            | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                                            |                                                        |
|                                     |                              |                                                                                                                                                            | · ·                                                                                     | į            |                                         | <transi< th=""><th>STOR&gt;</th></transi<> | STOR>                                                  |
| IC16                                | 9-939-300-01                 |                                                                                                                                                            | _G8658-02A(M38185ME-171FP)                                                              | Q10          | 9-939-330-01                            | TRANSISTOR                                 | KRC103M(AT) TO-92M TP KEC                              |
| IC17                                | 9-939-298-01                 | •                                                                                                                                                          | 7033P 3P 3 3V RESET                                                                     | Q11          | 9-939-330-01                            | TRANSISTOR                                 | KRC103M(AT) TO-92M TP KEC                              |
| IC201                               | 8-759-822-60                 | IC, SANYO LA7                                                                                                                                              | 222 (1280 AUDIO)                                                                        | Q1102        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| IC401                               | 1-809-389-11                 | IC,SANYO LC79                                                                                                                                              | 775J 14D CCD 1H D/LINE(NTSC                                                             | Q1102        | 9-939-330-01                            | TRANSISTOR                                 | KRC103M(AT) TO-92M TP KEC                              |
| IC402                               | 9-939-304-01                 | IC,SANYO LA74                                                                                                                                              | 125 36SD Y/C(NTSC,VCR)                                                                  | Q12<br>Q1201 | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| 70501                               | 0.020.205.01                 | ICHITACHI IIDA                                                                                                                                             | 9756NT 56SD 4HD SERVO                                                                   | Q1201        | 0-729-201-33                            | IKANSISTOR                                 | RICS198-11-1 (RIC1013)RDC                              |
| IC501                               | 9-939-305-01                 |                                                                                                                                                            | e i e di dillace i con i con con con concerni i con | 1 Q1202      | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
|                                     | 1,000,000                    |                                                                                                                                                            | RESARD WER AUTHORNOCESS                                                                 | Q1203        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| elelelelelelel marchinistration and | SX 759-420-64                | X XATSUSHIIA                                                                                                                                               |                                                                                         | Q1205        | 8-729-140-96                            | TRANSISTOR                                 | KTA1270-TP-Y (KTA562TM)KEC                             |
| 1C801                               | 9-939-307-01                 |                                                                                                                                                            | 12912PSC(CAPTION)DIP 18P                                                                | Q1206        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| IC802                               | 9-939-308-01                 | IC,MITSUBISHI                                                                                                                                              | M35041-065FP 20SOP OSD                                                                  | Q1241        | 9-939-331-01                            | TRANSISTOR                                 | KTC3197,TP(KTC388A),KEC                                |
|                                     |                              | <jack:< td=""><td>&gt;</td><td>01050</td><td>10 700 001 50</td><td>TD A NICIOTOR</td><td>MACCION AD A (MACINISMEC</td></jack:<>                            | >                                                                                       | 01050        | 10 700 001 50                           | TD A NICIOTOR                              | MACCION AD A (MACINISMEC                               |
| 117.10.1                            | 10.020.200.01                | IACIZ PARRIGNE                                                                                                                                             | AN FOR BONS!                                                                            | Q1252        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| JK101                               | 9-939-309-01                 | JACK, EARPHONE                                                                                                                                             |                                                                                         | Q1501        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| JK102                               | 9-939-310-01                 | JACK,RCA 2P VID                                                                                                                                            | EO; 1L,AUDIO;BK                                                                         | Q1502        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
|                                     |                              | <coil:< td=""><td>&gt;</td><td>Q1503</td><td>8-729-281-53</td><td>TRANSISTOR</td><td>KTC3198-TP-Y (KTC1815)KEC<br/>KTC3198-TP-Y (KTC1815)KEC</td></coil:<> | >                                                                                       | Q1503        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC<br>KTC3198-TP-Y (KTC1815)KEC |
|                                     |                              |                                                                                                                                                            |                                                                                         | Q1504        | 8-729-281-53                            | TRANSISTOR                                 | K1C3198-1F-1 (K1C1613)KEC                              |
|                                     | 9-908-973-01                 | COIL                                                                                                                                                       | DELAY LINE 48NS 3 58T                                                                   | Q1506        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| FL601                               | 9-939-293-01                 | COIL                                                                                                                                                       | L/C FILTER(07S) LPF                                                                     | Q1521        | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| J262                                | 1-410-514-11                 | INDUCTOR                                                                                                                                                   | 27UH K                                                                                  | Q201         | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| L10                                 | 1-410-513-11                 | INDUCTOR                                                                                                                                                   | 22UH K                                                                                  | Q202         | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| L1102                               | 9-939-311-01                 | COIL                                                                                                                                                       | CHOKE 0 79UH A 1105                                                                     | Q202         | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| L1105                               | 9-939-399-01                 | INDUCTOR,                                                                                                                                                  | 68UH K                                                                                  |              |                                         |                                            |                                                        |
| L1107                               | 1-410-363-11                 | INDUCTOR                                                                                                                                                   | 27UH K                                                                                  | Q401         | 8-729-201-53                            | TRANSISTOR                                 | KTA1266-TP-Y (KTA1015) KEC                             |
| L1110                               | 9-939-312-01                 | INDUCTOR                                                                                                                                                   | 12UH K                                                                                  | Q402         | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| L1111                               | 1-410-511-11                 | INDUCTOR                                                                                                                                                   | 15UH K                                                                                  | Q403         | 8-729-201-53                            | TRANSISTOR                                 | KTA1266-TP-Y (KTA1015) KEC                             |
| L1113                               | 1-410-511-11                 | INDUCTOR                                                                                                                                                   | 15UH K                                                                                  | Q404         | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
|                                     |                              |                                                                                                                                                            |                                                                                         | Q405         | 8-729-201-53                            | TRANSISTOR                                 | KTA1266-TP-Y (KTA1015) KEC                             |
| L1114                               | 1-410-511-11                 | INDUCTOR                                                                                                                                                   | 15UH K                                                                                  | Q406         | 9-939-330-01                            | TRANSISTOR                                 | KRC103M(AT) TO-92M TP KEC                              |
| L1201                               | 1-410-512-11                 | INDUCTOR                                                                                                                                                   | 18UH K                                                                                  | Q408         | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| (20V)                               | 1-410-511-11                 | INDUCTOR                                                                                                                                                   | 15UH K                                                                                  | Q409         | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |
| L1221                               | 9-939-314-01                 | COIL                                                                                                                                                       | SIF                                                                                     | Q501         | 8-729-201-53                            | TRANSISTOR                                 | KTA1266-TP-Y (KTA1015) KEC                             |
| L1222                               | 9-939-315-01                 | COIL                                                                                                                                                       | VAR,07S 6D 45 75MHZ                                                                     | Q501         | 9-939-330-01                            | TRANSISTOR                                 | KRC103M(AT) TO-92M TP KEC                              |
| L1223                               | 0.000.016.01                 | COIL                                                                                                                                                       | VIF                                                                                     | 1            |                                         |                                            | , ,                                                    |
|                                     | 9-939-116-01                 | COIL                                                                                                                                                       |                                                                                         |              |                                         |                                            |                                                        |
| L1501                               | 9-939-316-01<br>1-410-508-11 | INDUCTOR                                                                                                                                                   | 8 2UH K                                                                                 | Q503         | 8-729-281-53                            | TRANSISTOR                                 | KTC3198-TP-Y (KTC1815)KEC                              |

| DEE NO         | DADTNO                       | PERCHIMION                                                  | REMARK                                     | REF NO         | PART NO                               | DESCRIPTION                    | REMARK                     |
|----------------|------------------------------|-------------------------------------------------------------|--------------------------------------------|----------------|---------------------------------------|--------------------------------|----------------------------|
| REF NO         | PART NO                      | DESCRIPTION                                                 |                                            | i              |                                       |                                | ~                          |
| Q504           | 8-729-281-53                 |                                                             | 3-TP-Y (KTC1815)KEC                        | R1218          | 1-247-854-11                          | R,CARBON FILM                  | 9 1K 1/6W 5<br>10K 1/6W 5  |
| Q505<br>Q506   | 9-939-404-01<br>8-729-281-53 |                                                             | M(AT) TO-92M TP KEC<br>3-TP-Y (KTC1815)KEC | (20V)<br>R1219 | 1-249-429-11<br>1-247-854-11          | R,CARBON FILM<br>R,CARBON FILM | 9 1K 1/6W 5                |
| Q500<br>Q507   | 8-729-281-53                 |                                                             | B-TP-Y (KTC1815)KEC                        | R1221          | 1-249-433-11                          | R,CARBON FILM                  | 20K 1/6W 5                 |
| Q508           | 8-729-281-53                 |                                                             | B-TP-Y (KTC1815)KEC                        | R1222          | 1-214-840-00                          | R,CARBON FILM                  | 100 1/2W 5                 |
| Q601           | 8-729-803-86                 | TRANSISTOR KTC3203                                          | 5-Y (KTC2236A) TP KEC                      | R1223          | 1-249-438-11                          | R,CARBON FILM                  | 56K 1/6W 5                 |
| Q603           | 9-939-330-01                 |                                                             | M(AT) TO-92M TP KEC                        | (20V)          | 1-249-434-11                          | R,CARBON FILM                  | 27K 1/6W 5                 |
| Q605           | 8-729-803-86                 |                                                             | 3-Y TP(KTA966A) KEC                        | R1224          | 1-247-883-11                          | R,CARBON FILM                  | 150K 1/6W 5                |
| Q606           | 9-939-330-01                 |                                                             | M(AT) TO-92M TP KEC<br>8-TP-Y (KTC1815)KEC | (20V)          | 1-249-441-11                          | R,CARBON FILM                  | 100K 1/6W 5<br>5 6K 1/6W 5 |
| Q801           | 8-729-281-53                 |                                                             |                                            | R1225          | 1-249-426-11                          | R,CARBON FILM                  |                            |
| Q802           | 8-729-281-53                 |                                                             | 8-TP-Y (KTC1815)KEC                        | R1228          | 1-249-434-11                          | R,CARBON FILM                  | 27K 1/6W 5                 |
| Q803           | 8-729-281-53                 |                                                             | 8-TP-Y (KTC1815)KEC                        | R1229          | 1-249-421-11                          | R,CARBON FILM                  | 2 2K 1/6W 5<br>39K 1/6W 5  |
| Q804           | 9-939-330-01<br>8-729-281-53 |                                                             | M(AT) TO-92M TP KEC<br>8-TP-Y (KTC1815)KEC | R1230          | 1-249-436-11<br>1-249-433-11          | R,CARBON FILM<br>R,CARBON FILM | 39K 1/6W 5<br>22K 1/6W 5   |
| Q841<br>Q842   | 8-729-281-53                 | TRANSISTOR KTC319                                           |                                            | (20V)<br>R1236 | 1-249-423-11                          | R,CARBON FILM                  | 3 3K 1/6W 5                |
| Q042           | 0-127-201-33                 | <resistor></resistor>                                       | 0 11 1 (11101010)/1110                     |                |                                       |                                |                            |
|                |                              | (IEDDIDI OIL)                                               |                                            | R1237          | 1-249-423-11                          | R,CARBON FILM                  | 3 3K 1/6W 5<br>3 3K 1/6W 5 |
| FR1611         | 1-211-771-11                 | R,FUSIBLE                                                   | 4 7 1/2W 5                                 | R1238<br>(20V) | 1-249-423-11<br>1-259-454-11          | R,CARBON FILM<br>R,CARBON FILM | 12K 1/6W 5                 |
| R1             | 1-249-421-11                 | R,CARBON FILM                                               | 2 2K 1/6W 5                                | R1239          | 1-249-424-11                          | R,CARBON FILM                  | 3 9K 1/6W 5                |
| R10            | 1-247-815-91                 | R,CARBON FILM                                               | 220 1/6W 5                                 | (20V)          | 1-249-429-11                          | R,CARBON FILM                  | 10K 1/6W 5                 |
| R100<br>R101   | 1-249-429-11<br>1-249-429-11 | R,CARBON FILM<br>R,CARBON FILM                              | 10K 1/6W 5<br>10K 1/6W 5                   | 1              |                                       |                                | 007/ 1//37/ 5              |
|                |                              |                                                             |                                            | R1251          | 1-249-435-11                          | R,CARBON FILM                  | 33K 1/6W 5<br>6 8K 1/6W 5  |
| R102           | 1-249-429-11                 | R,CARBON FILM                                               | 10K 1/6W 5                                 | R1252<br>R1253 | 1-249-427-11<br>1-249-428-11          | R,CARBON FILM<br>R,CARBON FILM | 8 2K 1/6W 5                |
| R103           | 1-249-417-11                 | R,CARBON FILM                                               | 1 0K 1/6W 5                                | (20V)          | 1-249-433-11                          | R,CARBON FILM                  | 22K 1/6W 5                 |
| R104           | 1-249-429-11                 | R,CARBON FILM                                               | 10K 1/6W 5                                 | R1256          | 1-215-860-11                          | R,METAL FILM OXIDE             | 33 1W 5%                   |
| R105           | 1-249-429-11<br>1-249-417-11 | R,CARBON FILM                                               | 10K 1/6W 5<br>1 0K 1/6W 5                  |                |                                       | ,                              |                            |
| R106           | 1-249-41/-11                 | R,CARBON FILM                                               | 10k 1/0W 3                                 | R1260          | 9-939-334-01                          | R,METAL FILM OXIDE             | 330 1/2W 5                 |
| R107           | 1-249-421-11                 | R,CARBON FILM                                               | 2 2K 1/6W 5                                | R127           | 1-249-417-11                          | R,CARBON FILM                  | 1 OK 1/6W 5                |
| R108           | 1-249-417-11                 | R,CARBON FILM                                               | 1 0K 1/6W 5                                | R1270          | 1-249-405-11                          | R,CARBON FILM                  | 100 1/6W 5<br>1 0K 1/6W 5  |
| R109           | 1-249-435-11                 | R,CARBON FILM                                               | 33K 1/6W 5                                 | R13            | 1-249-417-11<br>1-249-439-11          | R,CARBON FILM<br>R,CARBON FILM | 68K 1/6W 5                 |
| R11            | 1-247-815-91                 | R,CARBON FILM                                               | 220 1/6W 5                                 | KISI           | 1-2-17-137-11                         | R,C/RCDOTT I ISM               |                            |
| R110           | 1-249-429-11                 | R,CARBON FILM                                               | 10K 1/6W 5                                 | R14            | 1-249-441-11                          | R.CARBON FILM                  | 100K 1/6W 5                |
| R1103          | 1-249-425-11                 | R,CARBON FILM                                               | 47K 1/6W 5                                 |                | \$ 1-249-428-11                       |                                | 8 28 189W 5                |
| R1105          | 1-249-836-11                 | R,CARBON FILM                                               | 1 6K 1/6W 5                                | R1403          | 1-247-818-11                          | R,CARBON FILM                  | 300 1/6W 5                 |
| R1107          | 1-249-411-11                 | R,CARBON FILM                                               | 330 1/6W 5                                 | R1407          | 1-249-410-11                          | R,CARBON FILM                  | 270 1/6W 5<br>470 1/6W 5   |
| R111           | 1-249-421-11                 | R,CARBON FILM                                               | 2 2K 1/6W 5                                | R1411          | 1-249-413-11                          | R,CARBON FILM                  | 470 170                    |
| R1111          | 1-247-816-11                 | R,CARBON FILM                                               | 240 1/6W 5                                 | R143           | 1-214-840-00                          | R,CARBON FILM                  | 100 1/2W 5                 |
| 701110         | 1-249-425-11                 | R,CARBON FILM                                               | 47K 1/6W 5                                 | R1501          | 1-215-860-11                          | R,METAL FILM OXIDE             | 33 1W 5%                   |
| R1118<br>R1119 | 1-249-425-11                 | R,CARBON FILM                                               | 13K 1/6W 5                                 | (20V)          | 1-216-424-11                          | R,METAL FILM OXIDE             | 39 1W 5%                   |
| R112           | 1-249-435-11                 | R,CARBON FILM                                               | 33K 1/6W 5                                 | R1503          | 1-249-413-11                          | R,CARBON FILM                  | 470K 1/6W 5                |
| R1122          | 1-247-852-11                 | R,CARBON FILM                                               | 7 5K 1/6W 5                                | (20V)          | 1-249-417-11                          | R,CARBON FILM                  | 1 0K 1/6W 5                |
| R1123          | 1-247-848-11                 | R,CARBON FILM                                               | 5 1K 1/6W 5                                | R1508          | 9-939-408-01                          | R,CARBON FILM                  | 220 1/2W 5                 |
| D1104          | 1-249-428-11                 | D CADDON EILM                                               | 8 2K 1/6W 5                                | R1521          | 9-939-589-01                          | R,CARBON FILM                  | 3 6K 1/6W 5                |
| R1124<br>R1126 | 1-249-428-11                 | R,CARBON FILM<br>R,CARBON FILM                              | 1 0K 1/6W 5                                | (20V)          | 1-249-433-11                          | R,CARBON FILM                  | 22K 1/6W 5                 |
| R1129          | 1-249-385-11                 | R,CARBON FILM                                               | 2 2 1/6W 5                                 | R1522          | 1-249-435-11                          |                                | 33K 1/6W 5                 |
| R113           | 1-249-429-11                 | R,CARBON FILM                                               | 10K 1/6W 5                                 | R1523          | 1-247-854-11                          | R,CARBON FILM                  | 9 1K 1/6W 5                |
| R1130          | 9-939-405-01                 | R,METAL FILM OXIDE                                          | 180 1W 5%                                  | R1526          | 1-249-437-11                          | R.CARBON FILM                  | 47K 1/6W 5                 |
| 2              |                              | D. C. I. D. C. I. D. I. | 1072 17677 5                               | R1527          | 1-249-433-11                          | ,                              | 20K 1/6W 5                 |
| R1131          | 1-249-417-11<br>1-247-800-11 | R,CARBON FILM<br>R,CARBON FILM                              | 1 0K 1/6W 5<br>51 1/6W 5                   | (20V)          | 1-247-866-11                          |                                | 30K 1/6W 5                 |
| R1137<br>R114  | 1-249-429-11                 | R,CARBON FILM                                               | 10K 1/6W 5                                 | R1530          | 1-247-842-11                          | •                              | 3 0K 1/6W 5                |
| R115           | 1-249-429-11                 | R,CARBON FILM                                               | 10K 1/6W 5                                 | (20V)          | 1-259-454-11                          | R,CARBON FILM                  | 12K 1/6W 5                 |
| R1166          | 1-249-413-11                 | R,CARBON FILM                                               | 470 1/6W 5                                 | D1521          | 1 240 421 11                          | R,CARBON FILM                  | 15K 1/6W 5                 |
|                |                              |                                                             |                                            | R1531          | 1-249-431-11<br>1-249-429-11          |                                | 10K 1/6W 5                 |
| R118           | 1-249-429-11                 | R,CARBON FILM                                               | 10K 1/6W 5                                 | R1601          | 9-939-409-01                          |                                | 68 1W 5%                   |
| R119           | 1-249-417-11                 |                                                             | 1 0K 1/6W 5<br>3 9K 1/6W 5                 | R1603          | 1-249-429-11                          | R,CARBON FILM                  | 10K 1/6W 5                 |
| R12            | 1-249-424-11<br>1-249-417-11 | R,CARBON FILM<br>R,CARBON FILM                              | 1 0K 1/6W 5                                | 8186           | <u> </u>                              | RIMETAL PILM CARDE             | 10.00                      |
| R120<br>R1200  | 9-939-406-01                 | R,CARBON FILM                                               | 680K 1/6W 5                                | 1              |                                       |                                |                            |
|                |                              |                                                             |                                            | 2 R1607        | <u>3</u> 9 9 9 4 19 9<br>1-247-854-11 |                                | 9.1K 1/6W 5                |
| R1201          | 1-249-413-11                 |                                                             | 470 1/6W 5                                 | R1608          |                                       |                                | 1 5K 1/6W 5                |
| R1203          | 1-247-838-00                 |                                                             | 2 0K 1/6W 5<br>5 6K 1/6W 5                 | R1614          |                                       |                                | 560 1/2W 5                 |
| R1205<br>R1207 | 1-249-426-11<br>1-247-852-11 |                                                             | 7 5K 1/6W 5                                | R1619          |                                       | R,CARBON FILM                  | 5 6K 1/6W 5                |
| R1207          | 1-249-439-11                 | -                                                           | 68K 1/6W 5                                 | 1              | 1 040 440 4-                          | D CADDOM ET A                  | 270 1/633 5                |
|                | ,0, 11                       | ,                                                           |                                            | R18            | 1-249-410-11                          |                                | 270 1/6W 5<br>220 1/6W 5   |
| R1209          | 1-249-423-11                 |                                                             | 3 3K 1/6W 5                                | R181           | 1-247-815-91<br>1-247-815 <b>-</b> 91 | •                              | 220 1/6W 5                 |
| R121           | 1-249-417-11                 |                                                             | 1 0K 1/6W 5                                | R183           | 1-249-417-11                          |                                | 1 0K 1/6W 5                |
| R1211          | 1-249-413-11                 |                                                             | 470 1/6W 5                                 | R19            | 1-249-410-11                          |                                | 270 1/6W 5                 |
| R1212<br>R1213 |                              | ·                                                           | 1 6K 1/6W 5<br>1 6K 1/6W 5                 | 1              |                                       |                                |                            |
| R1213          |                              | •                                                           | 15K 1/6W 5                                 | R2             | 1-249-421-11                          |                                | 2 2K 1/6W 5                |
| (20V)          | 1-259-454-11                 |                                                             | 12K 1/6W 5                                 | R20            | 1-249-410-11                          |                                | 270 1/6W 5                 |
| ( · · · )      |                              | •                                                           |                                            | R21            | 1-247-815-91                          | R,CARBON FILM                  | 220 1/6W 5                 |

| REF NO       | PART NO                      | DESCRIPTION                    | REMARK                     | REF NO     | PART NO                                 | DESCRIPTION                              | REMARK                   |
|--------------|------------------------------|--------------------------------|----------------------------|------------|-----------------------------------------|------------------------------------------|--------------------------|
| R22          | 1-247-815-91                 | R,CARBON FILM                  | 220 1/6W 5                 | R61        | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| R220         | 1-249-441-11                 | R,CARBON FILM                  | 100K 1/6W 5                | R612       | 1-249-401-11                            | R,CARBON FILM                            | 47 1/6W 5                |
| R221         | 1-249-437-11                 | R,CARBON FILM                  | 47K 1/6W 5                 | R614       | 1-249-404-11                            | R.CARBON FILM                            | 82 1/6W 5                |
| R229         | 1-249-389-11                 | R,CARBON FILM                  | 4 7 1/6W 5                 | R62        | 1-249-426-11                            | R,CARBON FILM                            | 5 6K 1/6W 5              |
|              |                              |                                |                            | R625       | 1-249-435-11                            | R,CARBON FILM                            | 33K 1/6W 5               |
| R23          | 1-247-815-91                 | R,CARBON FILM                  | 220 1/6W 5                 | i          |                                         |                                          |                          |
| R26          | 1-249-439-11                 | R,CARBON FILM                  | 68K 1/6W 5                 | R63        | 1-247-815-91                            | R,CARBON FILM                            | 220 1/6W 5               |
| R28          | 1-249-439-11                 | R,CARBON FILM                  | 68K 1/6W 5                 | R632       | 1-249-436-11                            | R,CARBON FILM                            | 39K 1/6W 5               |
| R31          | 1-249-421-11                 | R,CARBON FILM                  | 2 2K 1/6W 5                | R638       | 1-249-435-11                            | R,CARBON FILM                            | 33K 1/6W 5               |
| R35          | 1-249-417-11                 | R,CARBON FILM                  | 1 0K 1/6W 5                | R639       | 1-249-393-11                            | R,CARBON FILM                            | 10 1/6W 5                |
|              |                              |                                |                            | R64        | 1-247-815-91                            | R,CARBON FILM                            | 220 1/6W 5               |
| R36          | 1-247-815-91                 | R,CARBON FILM                  | 220 1/6W 5                 | į          |                                         |                                          |                          |
| R38          | 1-249-438-11                 | R,CARBON FILM                  | 56K 1/6W 5                 | R645       | 1-249-393-11                            | R,CARBON FILM                            | 10 1/6W 5                |
| R39          | 1-247-815-91                 | R,CARBON FILM                  | 220 1/6W 5                 | R65        | 1-247-791-91                            | R,CARBON FILM                            | 22 1/6W 5                |
| R4           | 1-249-417-11                 | R,CARBON FILM                  | 1 0K 1/6W 5                | R66        | 1-247-815-91                            | R,CARBON FILM                            | 220 1/6W 5               |
| R40          | 1-247-815-91                 | R,CARBON FILM                  | 220 1/6W 5                 | R67        | 1-247-815-91                            | R,CARBON FILM                            | 220 1/6W 5               |
|              |                              |                                |                            | R69        | 1-249-421-11                            | R,CARBON FILM                            | 2 2K 1/6W 5              |
| R409         | 1-249-425-11                 | R,CARBON FILM                  | 47K 1/6W 5                 | i          |                                         |                                          |                          |
| R41          | 1-249-417-11                 | R,CARBON FILM                  | 1 0K 1/6W 5                | R70        | 1-249-425-11                            | R,CARBON FILM                            | 4 7K 1/6W 5              |
| R415         | 1-249-421-11                 | R,CARBON FILM                  | 2 2K 1/6W 5                | R71        | 1-249-425-11                            | R,CARBON FILM                            | 4 7K 1/6W 5              |
| R419         | 1-249-429-11                 | R,CARBON FILM                  | 10K 1/6W 5                 | R74        | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| R421         | 1-249-417-11                 | R,CARBON FILM                  | 1 0K 1/6W 5                | R75        | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| D 400        | 1 240 402 **                 | D CADDOM DIL M                 | 2 2V 1/6W 5                | R76        | 1-249-425-11                            | R,CARBON FILM                            | 4 7K 1/6W 5              |
| R423         | 1-249-423-11                 | R,CARBON FILM                  | 3 3K 1/6W 5<br>1 2K 1/6W 5 | 1          | 1 240 405 11                            | D CARRON PULL                            | 17V 16W 5                |
| R431         | 1-249-418-11                 | R,CARBON FILM                  | 1 2K 1/6W 5<br>15K 1/6W 5  | R77        | 1-249-425-11                            | R,CARBON FILM                            | 4 7K 1/6W 5              |
| R432         | 1-249-431-11                 | R,CARBON FILM<br>R,CARBON FILM | 390 1/6W 5                 | R78        | 9-939-339-01<br>9-939-339-01            | R,METAL FILM OXID                        |                          |
| R434<br>R435 | 1-259-418-11<br>1-249-425-11 | R,CARBON FILM                  | 47K 1/6W 5                 | R79<br>R80 | 1-249-417-11                            | R,METAL FILM OXID<br>R,CARBON FILM       | 1 0K 1/6W 5              |
| K433         | 1*247-42,7-11                | K,CARDON FILM                  | 47K 110W 3                 | R806       | 1-249-417-11                            |                                          | 1 0K 1/6W 5              |
| R437         | 1-249-429-11                 | R,CARBON FILM                  | 10K 1/6W 5                 | 1 1000     | 1-2-47-417-11                           | R,CARDON HEM                             | 1011 11011 5             |
| R48          | 1-247-815-91                 | R,CARBON FILM                  | 220 1/6W 5                 | R815       | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| R5           |                              | R,CARBON FILM                  | 1 0K 1/6W 5                | R816       | 1-249-417-11                            | R,CARBON FILM                            | 1.0K 1/6W 5              |
| R501         | 1-249-429-11                 | R,CARBON FILM                  | 10K 1/6W 5                 | R822       | 1-249-441-11                            | R,CARBON FILM                            | 100K 1/6W 5              |
| R502         | 1-249-421-11                 | R,CARBON FILM                  | 2 2K 1/6W 5                | R823       | 1-249-429-11                            | R,CARBON FILM                            | 10K 1/6W 5               |
| 1400=        |                              | ,                              |                            | R827       | 1-214-753-00                            | R,METAL FILM                             | 10K 1/6W 1               |
| R503         | 1-249-431-11                 | R,CARBON FILM                  | 15K 1/6W 5                 | 1          | 1 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 |                                          |                          |
| R504         | 1-249-441-11                 | R,CARBON FILM                  | 100K 1/6W 5                | R842       | 1-249-421-11                            | R,CARBON FILM                            | 2 2K 1/6W 5              |
| R505         | 1-249-441-11                 | R,CARBON FILM                  | 100K 1/6W 5                | R846       | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| R506         | 1-249-434-11                 | R,CARBON FILM                  | 27K 1/6W 5                 | R847       | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| R507         | 1-249-435-11                 | R,CARBON FILM                  | 33K 1/6W 5                 | R848       | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
|              |                              |                                |                            | R849       | 1-249-423-11                            | R,CARBON FILM                            | 3 3K 1/6W 5              |
| R508         | 1-249-421-11                 | R,CARBON FILM                  | 2 2K 1/6W 5                | 1          |                                         |                                          |                          |
| R509         | 1-249-417-11                 | R,CARBON FILM                  | 1 0K 1/6W 5                | R850       | 1-249-429-11                            | R,CARBON FILM                            | 10K 1/6W 5               |
| R510         | 1-249-414-11                 | R,CARBON FILM                  | 560 1/6W 5                 | R856       | 1-249-437-11                            | R,CARBON FILM                            | 47K 1/6W 5               |
| R511         | 1-249-414-11                 | R,CARBON FILM                  | 560 1/6W 5                 | R857       | 1-247-887-00                            | R,CARBON FILM                            | 220K 1/6W 5              |
| R513         | 1-249-417-11                 | R,CARBON FILM                  | 1 0K 1/6W 5                | R858       | 1-249-429-11                            | R,CARBON FILM                            | 10K 1/6W 5               |
|              |                              |                                |                            | R859       | 1-249-429-11                            | R,CARBON FILM                            | 10K 1/6W 5               |
| R518         | 1-249-426-11                 | ,                              | 5 6K 1/6W 5                | 1          |                                         | ·                                        |                          |
| R519         | 1-249-417-11                 |                                | 1 0K 1/6W 5                | R89        | 1-249-413-11                            | R,CARBON FILM                            | 470 1/6W 5               |
| R521         | 1-247-897-11                 |                                | 560K 1/6W 5                | R90        | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| R523         | 1-259-454-11                 |                                | 12K 1/6W 5                 | R91        | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| R524         | 1-249-432-11                 | R,CARBON FILM                  | 18K 1/6W 5                 | R92        | 1-247-815-91                            | ·                                        | 220 1/6W 5               |
| nece.        | 1 240 422 **                 | D CADDOM ETTAL                 | 22K 1/6W 5                 | R93        | 1-247-815-91                            | R,CARBON FILM                            | 220 1/6W 5               |
| R525         | 1-249-433-11                 |                                | 22K 1/6W 5<br>39K 1/6W 5   | . DO4      | 1 247 015 01                            | D CADDON EILM                            | 220 1/6W 5               |
| R529<br>R53  | 1-249-436-11                 | R,CARBON FILM                  | 2 2K 1/6W 5                | R94        | 1-247-815-91                            | R,CARBON FILM<br>R.CARBON FILM           | 220 1/6W 5<br>220 1/6W 5 |
| R532         | 1-249-421-11                 |                                | 120K 1/6W 5                | R95        | 1-247-815-91                            | •                                        | 220 1/6W 5<br>220 1/6W 5 |
| R532<br>R538 |                              | R,CARBON FILM                  | 560 1/6W 5                 | R96<br>R97 | 1-247-815-91<br>1-247-815-91            |                                          | 220 1/6W 5<br>220 1/6W 5 |
| KJ30         | 1-4-7-414-11                 | RCHROON FILM                   | 500 11011 5                | R98        | 1-247-813-91                            | •                                        | 1 0K 1/6W 5              |
| R539         | 1-249-414-11                 | R,CARBON FILM                  | 560 1/6W 5                 | 1 1.70     | 1-247-417-11                            | ASCENDED FILM                            | 1011 1                   |
| R544         | 1-249-437-11                 |                                | 47K 1/6W 5                 | R99        | 1-249-417-11                            | R,CARBON FILM                            | 1 0K 1/6W 5              |
| R545         | 1-249-441-11                 |                                | 100K 1/6W 5                |            | 1-241-763-11                            |                                          | RH0638CS3R2HB B472       |
| R546         | 1-249-426-11                 |                                | 5 6K 1/6W 5                |            | 1-238-016-11                            |                                          | RH0638C14R31B B103       |
| R547         | 1-249-436-11                 |                                | 39K 1/6W 5                 | 1          | 9-939-415-01                            |                                          | EVN-DJAA03 B103          |
|              |                              |                                | -                          | 1          | 1-238-016-11                            |                                          | RH0638C14R31B B103       |
| R550         | 1-249-425-11                 | R,CARBON FILM                  | 4 7K 1/6W 5                | 1          |                                         |                                          |                          |
| R552         |                              | R,CARBON FILM                  | 1 0M 1/6W 5                | VR401      | 9-939-343-01                            | R,HORI                                   | RH0638C13R2DB B102       |
| R58          | 1-249-425-11                 |                                | 4 7K 1/6W 5                | VR501      | 1-241-767-21                            | ,                                        | EVN-DJAA03 B104          |
| R59          | 1-249-441-11                 |                                | 100K 1/6W 5                | VR601      | 9-939-344-01                            |                                          | EVN-DJAY03 B204          |
| R60          | 1-249-417-11                 |                                | 1 0K 1/6W 5                | 1          |                                         |                                          |                          |
|              |                              |                                |                            | -          |                                         | <switch:< td=""><td>&gt;</td></switch:<> | >                        |
| R606         | 1-249-393-11                 |                                | 10 1/6W 5                  | SW11       | 1-571-532-21                            | SWITCH                                   | TACT VERT                |
| R609         | 1-249-425-11                 | R,CARBON FILM                  | 4 7K 1/6W 5                | SW12       | 1-571-532-21                            |                                          | TACT VERT                |
|              |                              |                                |                            | 1          |                                         |                                          |                          |

| REF NO                                  | PART NO                      | DESCRIPTION                                                                                                                                                             | REMARK                                     | REF NO         | PART NO                          | DESCRIPTION                          | REMARK                                         |
|-----------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------|----------------------------------|--------------------------------------|------------------------------------------------|
| SW13<br>SW14                            | 1-571-532-21<br>1-571-532-21 |                                                                                                                                                                         | TACT VERT<br>TACT VERT                     | C1815<br>C1816 | 1-107-641-11<br>1-128-563-11     | C,ELECTROLYTIC<br>C,ELECTROLYTIC     | 220UF STD 160V M<br>100UF STD 100V M           |
| SW15                                    | 1-571-532-21                 |                                                                                                                                                                         | TACT VERT                                  | C1817          | 9-908-970-01                     |                                      | IELE) 1200P 500V K                             |
| SW1501                                  | 9-908-991-01                 | SWITCH                                                                                                                                                                  | SVC P12T21                                 | C1818          | 1-126-953-11                     | C,ELECTROLYTIC C,ELECTROLYTIC        | 2200UF STD 35V M<br>1000UF STD 25V M           |
|                                         | <                            | MISCELLANE (                                                                                                                                                            | OUS>                                       | I<br>I         | 1-126-942-61                     |                                      |                                                |
| TU1101                                  | 9-939-340-01                 |                                                                                                                                                                         | ГUGH9-A07A                                 | C1820<br>C1821 | 1-165-127-11<br>1-165-127-11     |                                      | IELE) 470PF 500V K<br>IELE) 470PF 500V K       |
| X10                                     | 9-939-345-01                 |                                                                                                                                                                         | CST6 00MGW-TF01                            | C1822          | 1-126-951-11                     | C,ELECTROLYTIC                       | 470UF STD 35V M                                |
| X11<br>X1401                            | 9-939-346-01<br>1-577-706-11 |                                                                                                                                                                         | 32 7680KHZ +-10PPM<br>RESO CSB503F30 503 5 | C1823          | 1-126-953-11                     | C,ELECTROLYTIC                       | 2200UF STD 35V M                               |
| X1501                                   | 9-939-347-01                 |                                                                                                                                                                         | 3 579545 16PF 90 OHM                       | C1824          | 1-126-964-11                     | C,ELECTROLYTIC                       | 10UF STD 50V M                                 |
| X401                                    | 9-939-348-01                 | CRYSTAL 3                                                                                                                                                               | 3 579545 90 OHM                            | V              | 9-939-123-01                     | C.DETTO                              | ( C ( ( ) ) )                                  |
| Z1101                                   | 9-939-349-01                 |                                                                                                                                                                         | SAW,M1958M                                 | C1826<br>C1827 | 1-106-220-00                     | C,POLYESTER(MYLA<br>C,POLYESTER(MYLA |                                                |
| Z1102                                   | 9-939-350-01                 |                                                                                                                                                                         | B P FILTER SFSH4 5MCB-TF21                 | C1829          | 9-939-287-01                     | C POLYESTER(MYL                      |                                                |
| Z1103                                   | 9-939-351-01                 | FILTER                                                                                                                                                                  | TRAP TPS4 5MC-TF21                         |                | 9-939-433-63                     | COSTIN                               |                                                |
|                                         | * 9-939-                     | 462-01 D MOUNT COMI                                                                                                                                                     | PLETE (13V)                                | C1831          | 1-126-963-11                     | C,ELECTROLYTIC                       | 4 7UF STD 50V M                                |
|                                         | 9-939-                       | 359-01 D MOUNT COM                                                                                                                                                      | PLETE (20V)                                | C1832          | 9-909-477-01                     | C,DE1710-798                         | 4700PF 1K K                                    |
|                                         |                              | ::::::::::                                                                                                                                                              | 2 3 4 4<br>5 3 4 5                         | C1833          | 1-126-934-11                     | C,ELECTROLYTIC                       | 220UF STD 16V M<br>47UF STD 25V M              |
|                                         |                              | <capacito< td=""><td>R&gt;</td><td>C1834<br/>C1835</td><td>1-104-664-11<br/>1-126-934-11</td><td>C,ELECTROLYTIC C,ELECTROLYTIC</td><td>220UF STD 16V M</td></capacito<> | R>                                         | C1834<br>C1835 | 1-104-664-11<br>1-126-934-11     | C,ELECTROLYTIC C,ELECTROLYTIC        | 220UF STD 16V M                                |
|                                         |                              |                                                                                                                                                                         |                                            | C1837          | 1-126-934-11                     | C.ELECTROLYTIC                       | 220UF STD 16V M                                |
| C1219                                   | 9-939-390-01                 | C,PP                                                                                                                                                                    | 200V 0 022UF K<br>ELE) 560PF 500V K        | C1838          | 1-126-934-11                     | C,ELECTROLYTIC                       | 330UF STD 25V M                                |
| C1221<br>C1222                          | 1-102-157-00<br>1-126-952-11 | C.ELECTROLYTIC                                                                                                                                                          | 1000UF STD 16V M                           |                |                                  | <diode></diode>                      |                                                |
| C1300                                   | 1-162-306-11                 | C,TUBULA(HIGH DIE                                                                                                                                                       |                                            | i              |                                  | <diode></diode>                      |                                                |
| C1301                                   | 1-106-371-00                 | C,POLYESTER(MYLA                                                                                                                                                        | (R) 0 015MF 100V K                         | D1302          | 8-719-300-33                     |                                      | TVR06J 0 6A/600V 250NS                         |
| C1302                                   | 1-124-903-11                 | C,ELECTROLYTIC                                                                                                                                                          | 1UF KU 50V M                               | D1304          | 8-719-300-33                     |                                      | RU-2MV<br>1S2471                               |
| C1302                                   | 1-106-367-00                 | C,POLYESTER(MYLA                                                                                                                                                        |                                            | D1305          | 8-719-815-85<br>8-719-815-85     |                                      | 182471                                         |
| C1304                                   | 1-106-367-00                 | C,POLYESTER(MYLA                                                                                                                                                        | AR) 001U 100V K                            | D1308          | 8-719-815-85                     | DIODE                                | 1S2471                                         |
| C1305                                   | 1-106-385-00                 | C,POLYESTER(MYLA                                                                                                                                                        |                                            | 1              | errana analika anaka salika sa   |                                      | ·                                              |
| C1306                                   | 1-126-943-11                 | C,ELECTROLYTIC                                                                                                                                                          | 2200UF STD 25V M                           | D1405          | 8-719-300-80                     | DIODE                                | 80-38-5<br>RU-1A V                             |
| C1307                                   | 1-126-962-11                 | C,ELECTROLYTIC                                                                                                                                                          | 3 3UF STD 50V M                            | D1410          | 8-719-815-85                     | DIODE                                | 182471                                         |
| C1307                                   | 9-939-392-01                 | C,ELECTROLYTIC                                                                                                                                                          | 3 3UF KU 50V M                             |                | 8-719-018-11                     | DIODE                                | ESIF                                           |
| C1308<br>C1310                          | 9-939-291-01<br>1-126-933-11 | C,POLYESTER(MYLA<br>C,ELECTROLYTIC                                                                                                                                      | AR) 0 1UF S 50V J<br>100UF STD 16V M       | D1802          | 8-719-304-63                     | DIODE                                | RM11AV 1 2A/600V 100A                          |
| C1310                                   | 1-126-969-11                 | C,ELECTROLYTIC                                                                                                                                                          | 220UF STD 50V M                            | D1803          | 8-719-300-33                     | DIODE                                | GP15J (1 5A/600V)                              |
| 0.0                                     |                              |                                                                                                                                                                         |                                            | D1804          | 8-719-300-33                     | DIODE                                | TVR06J 0 6A/600V 250NS                         |
| C1313                                   | 1-102-157-00                 |                                                                                                                                                                         | ELE) 560PF 500V K                          | D1805          | 8-719-300-33                     | DIODE                                | TVR06J 0 6A/600V 250NS                         |
| C1314<br>C1317                          | 1-126-952-11<br>1-126-967-11 | C,ELECTROLYTIC<br>C,ELECTROLYTIC                                                                                                                                        | 1000UF STD 35V M<br>47UF STD 50V M         | D1806          | 8-719-300-33<br>8-719-300-70     | DIODE<br>DIODE                       | TVR06J 0 6A/600V 250NS<br>EH-1ZV               |
| C1403                                   | 1-106-355-12                 |                                                                                                                                                                         |                                            | 1 1/1007       | 6-719-300-70                     | DIODE                                | B11-12 V                                       |
| C1410                                   | 1-107-618-11                 | C,CERAMIC(HIGH D                                                                                                                                                        | IELE) 180P 500V K                          | D1809          | 8-719-300-33                     | DIODE                                | RU3AMV                                         |
| C1411                                   | 1-164-646-11                 | C,CERAMIC(HIGH D                                                                                                                                                        | IELE) 2200PE 500V K                        | D1810          | 8-719-961-04                     | DIODE<br>DIODE                       | RGP10J<br>FML-G12S                             |
|                                         | A. 9-989-883-83              | C 3499                                                                                                                                                                  | 36000 (0007) of 18                         | D1811          | 9-908-006-01<br>8-719-961-04     | DIODE                                | RGP10J                                         |
|                                         | <u> </u>                     | CMPP                                                                                                                                                                    | 1600V 0.00CuF H                            | D1813          | 9-908-006-01                     | DIODE                                | FML-G12S                                       |
| C1414                                   | 1-165-127-11                 |                                                                                                                                                                         | (ELE) 470PF 500V K<br>200V X 300F I        | D1014          | 0.710.061.04                     | DIODE                                | DCD101                                         |
|                                         | A94093000                    | CXC                                                                                                                                                                     | and the second of                          | D1814          | 8-719-961-04<br>8-719-300-33     | DIODE<br>DIODE                       | RGP10J<br>TVR06J 0 6A/600V 250NS               |
| C1416                                   | 1-126-772-11                 | C,ELECTROLYTIC                                                                                                                                                          | 1UF STD 250V M                             | D1817          | 8-719-300-33                     |                                      | TVR06J 0 6A/600V 250NS                         |
| C1417                                   | 1-126-967-11                 | C,ELECTROLYTIC                                                                                                                                                          | 47UF STD 50V M                             | D1818          | 8-719-815-85                     | DIODE                                | 1S2471                                         |
| C1419<br>C1420                          | 9-939-393-01<br>9-909-475-01 | C,ELECTROLYTIC<br>C,CERAMIC(HI-K)                                                                                                                                       | 250V 4 7UF T HR (85)<br>2200PF 2KV         | D1819          | 8-719-815-85                     | DIODE                                | 1S2471                                         |
|                                         |                              | CELECTRON                                                                                                                                                               | 600 F \$310 900 VA                         | D1820          | 8-719-815-85                     | DIODE                                | 1S2471                                         |
| 600000000000000000000000000000000000000 |                              |                                                                                                                                                                         |                                            | D1821          | 8-719-815-85                     | DIODE                                | 1S2471                                         |
|                                         | <u> </u>                     |                                                                                                                                                                         |                                            | D1824          | 8-719-304-63                     | DIODE                                | RM11AV 1 2A/600V 100A                          |
| C1802                                   | 9-939-284-01                 | CAPACITOR                                                                                                                                                               | 1KV B 2200PF K                             | D1825<br>D1826 | 8-719-304-63<br>8-719-304-63     | DIODE<br>DIODE                       | RM11AV 1 2A/600V 100A<br>RM11AV 1 2A/600V 100A |
| C1803                                   | 9-939-284-01                 | CAPACITOR                                                                                                                                                               | 1KV B 2200PF K                             | 1              | 0 /15 50. 05                     | 2.022                                |                                                |
| C1804                                   | 9-939-284-01                 | CAPACITOR                                                                                                                                                               | 1KV B 2200PF K                             | D1828          | 8-719-300-33                     |                                      | TVR06J 0 6A/600V 250NS                         |
| C1805                                   | 9-939-284-01                 | CAPACITOR                                                                                                                                                               | 1KV B 2200PF K                             | D1829          | 8-719-815-85<br>8-719-815-85     |                                      | 1S2471<br>1S2471                               |
| C1806                                   | 9-939-420-01                 | C,ELECTROLYTIC                                                                                                                                                          | 450V 220UF M                               | D1830          | 8-719-815-85                     |                                      | 1S2471                                         |
| C1807                                   | 1-136-539-11                 | C,POLYPROPYLENE                                                                                                                                                         | *10                                        |                |                                  |                                      |                                                |
| C1808                                   | 1-164-645-11                 | C,CERAMIC(HIGH D                                                                                                                                                        | 1000PF 500V K<br>10UF STD 100V M           |                | 8-719-921-63                     |                                      | MT77.58<br>887.2388                            |
| C1809                                   | 1-124-667-11                 | C,ELECTROLYTIC                                                                                                                                                          | IOOT. SID IOOA M                           |                | Ду. 1997-1953)<br>Ду. 1997-1953  |                                      | 100 M                                          |
| C1810                                   | 1-104-665-11                 | C,ELECTROLYTIC                                                                                                                                                          | 100UF STD 25V M                            |                | <u> </u>                         |                                      | M874.38                                        |
| C1811                                   | 1-126-934-11                 | C,ELECTROLYTIC                                                                                                                                                          | 220UF STD 16V M                            |                | 8-719-982-03                     |                                      | MTZ3 6B                                        |
| C1812<br>C1813                          | 1-165-127-11<br>1-164-646-11 | C,CERAMIC(HIGH D<br>C,CERAMIC(HIGH D                                                                                                                                    |                                            | 7D1000         | 8-719-109-97                     | DIODE ZENER                          | MTZ6 8B                                        |
| C1813                                   | 1-104-646-11                 | ,                                                                                                                                                                       | 10UF STD 100V M                            |                | 5 8-719-109-97<br>5 8-719-921-80 |                                      | MTZ 11B                                        |
|                                         |                              |                                                                                                                                                                         |                                            | 1              |                                  |                                      |                                                |

|                                         |                                         |                                                                                                                                                  |                                                         |                  |                                    |                                          | DEMANA                                     |
|-----------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------|------------------------------------|------------------------------------------|--------------------------------------------|
| REF NO                                  | PART NO                                 | DESCRIPTION                                                                                                                                      | REMARK<br>                                              | REF NO           | PART NO                            | DESCRIPTION                              | REMARK                                     |
|                                         | 8-719-921-49                            | DIODE ZENER                                                                                                                                      | MTZ6 2B                                                 | Q1816            | 8-729-281-53                       | TRANSISTOR                               | KTC3198-TP-Y (KTC1815)KEC                  |
|                                         | 8-719-921-80<br>8-719-982-03            | DIODE ZENER<br>DIODE ZENER                                                                                                                       | MTZ 11B<br>MTZ3 6B                                      | Q1817<br>Q1818   | 8-729-206-81<br>8-729-281-53       | TRANSISTOR<br>TRANSISTOR                 | KTA968A-Y KEC<br>KTC3198-TP-Y (KTC1815)KEC |
|                                         | 8-719-110-41                            | DIODE,ZENER                                                                                                                                      | MTZ15B TP ROHM                                          | Q1850            | 8-729-037-08                       | TRANSISTOR                               | KTD2058-Y KEC                              |
|                                         | ZD1833 8-719-982-26 DIODE ZENER MTZ 33B |                                                                                                                                                  |                                                         |                  |                                    | <rela< td=""><td>Y&gt;</td></rela<>      | Y>                                         |
| ZD1850                                  | 8-719-110-41                            | DIODE,ZENER                                                                                                                                      | MTZ15B TP ROHM                                          |                  | 49.999.333-01                      |                                          |                                            |
|                                         |                                         | <ferrite< td=""><td>CORE&gt;</td><td>WI 1812</td><td>19-939-333-01</td><td>BELAY</td><td>579-03-57-57-57</td></ferrite<>                         | CORE>                                                   | WI 1812          | 19-939-333-01                      | BELAY                                    | 579-03-57-57-57                            |
|                                         | 1-412-911-11                            | CORE                                                                                                                                             | FERRITE BFD3565R2F                                      |                  |                                    | <resist< td=""><td>OR&gt;</td></resist<> | OR>                                        |
|                                         | 1-408-105-00<br>1-408-105-00            | CORE<br>CORE                                                                                                                                     | FERRITE LUH<br>FERRITE LUH                              | ED 1241          | 1-217-418-00                       | R,FUSIBLE                                | 0 47 1/2W 5                                |
|                                         | 1-408-105-00                            | CORE                                                                                                                                             | FERRITE IUH                                             | FR1315           |                                    | R.FUSIBLE                                | 0.47 1/2W 5                                |
| FB1803                                  | 1-412-911-11                            | CORE                                                                                                                                             | FERRITE BFD3565R2F                                      |                  | \$8-217-418-00                     | 0.00 SIMIS                               |                                            |
| FB1804                                  | 1-412-911-11                            | CORE                                                                                                                                             | FERRITE BFD3565R2F                                      | FR1422<br>(20V)  | 1-217-198-01<br>9-909-899-01       | R,FUSIBLE<br>R,FUSIBLE                   | 0 68 2W 5%<br>1 60 2W 5%                   |
|                                         |                                         | <fusi< td=""><td>E&gt;</td><td>ED 1402</td><td>1 217 419 00</td><td>D ELIGIDI E</td><td>0 47 1/2W 5</td></fusi<>                                 | E>                                                      | ED 1402          | 1 217 419 00                       | D ELIGIDI E                              | 0 47 1/2W 5                                |
| F1801 Z                                 |                                         | FUSE                                                                                                                                             | 255 44 THE LAG                                          | FR1423<br>FR1428 | 1-217-418-00<br>1-260-100-11       | R,FUSIBLE<br>R,FUSIBLE                   | 1 2K 1/2W 5                                |
|                                         | \$4499-294-01                           | FUSE                                                                                                                                             | NOCRO (259 4444                                         | FR1429           | 1-260-100-11                       | R,FUSIBLE                                | 1 2K 1/2W 5                                |
| F1804                                   | 9-939-294-01                            | FUSE                                                                                                                                             | MICRO 125V 4 0A                                         | FR1806<br>FR1810 | 1-260-100-11<br>1-212-982-00       | R,FUSIBLE<br>R,FUSIBLE                   | 1 2K 1/2W 5%<br>100 1/2W 5%                |
| F1004                                   | 9-939-294-01                            |                                                                                                                                                  |                                                         | PKIOIO           | 1-212-902-00                       | K,I CSIDEE                               | 100 11247 570                              |
|                                         |                                         | <ic></ic>                                                                                                                                        | >                                                       | FR1827<br>FR1829 | 1-217-198-01<br>1-249-478-11       | R,FUSIBLE<br>R,FUSIBLE                   | 0 68 2W 5%<br>1/2W 2 2 J                   |
| IC1301                                  | 9-939-297-01                            |                                                                                                                                                  | TA8445K 12S 2 2A R/G+V OUT                              | FR1838           | 9-939-460-01                       | R,FUSIBLE                                | 10 2W 5%                                   |
| IC1801                                  | 8.749.924-XX                            | IC.SANKEN                                                                                                                                        | STR/S6707(LF 953) 9P (R5 R6)                            | (20V)            | 1-217-198-01                       | R,FUSIBLE                                | 0 68 2W 5%                                 |
| 1039034                                 | Salaman or                              | K.SHARP                                                                                                                                          | PERSONAL PROPERTY CONTRACTOR                            | R1215            | 9-933-000-01                       | R,CARBON FILM                            | 91K 1/2W 5                                 |
| IC18942                                 | £8.749.923-89                           | K.SANKES                                                                                                                                         | SELECTION OF THE SERVICE AND                            | R1217            | 1-249-433-11                       | R,CARBON FILM                            | 20K 1/6W 5                                 |
| IC1806                                  | 9-939-302-01                            | IC,KEC                                                                                                                                           | KIA7806PI TO-220IS 6V,1A                                | R1235<br>R1247   | 1-249-435-11<br>1-260-124-11       | R,CARBON FILM<br>R,CARBON FILM           |                                            |
| IC1807                                  | 9-939-303-01                            | IC,KEC                                                                                                                                           | KIA7812PI 3P(TO-220IS) 12V,1A                           | (20V)            | 9-933-000-01                       | R,CARBON FILM                            |                                            |
| IC1809                                  | 9-939-303-01                            | IC,KEC                                                                                                                                           | KIA7812PI 3P(TO-220IS) 12V,1A                           | D 1201           | 1 240 424 11                       | D CARRON EILM                            | 1 3 9K 1/6W 5                              |
|                                         |                                         | <coi< td=""><td>L&gt;</td><td>R1301<br/>R1302</td><td>1-249-424-11<br/>1-247-842-11</td><td>R,CARBON FILM<br/>R,CARBON FILM</td><td></td></coi<> | L>                                                      | R1301<br>R1302   | 1-249-424-11<br>1-247-842-11       | R,CARBON FILM<br>R,CARBON FILM           |                                            |
| 100000000000000000000000000000000000000 | A.C. 600 576 03                         | CORE                                                                                                                                             | H LINEARTY TO H                                         | R1304            | 1-249-428-11                       | R,CARBON FILM                            |                                            |
| L1403                                   | 9-939-317-01                            | COIL                                                                                                                                             | CHOKE 6800UH R 1218                                     | R1306<br>R1307   | 1-215-428-00<br>1-247-860-11       | R,METAL FILM<br>R,CARBON FILM            | 2K 1/6W 5<br>1 16K 1/6W 5                  |
| L1404                                   | 1-410-514-11                            | INDUCTOR,                                                                                                                                        | 27UH K                                                  | l Kisor          | 1-247-000-11                       | R,C/IRBONTIEM                            |                                            |
| L1701                                   | 9-939-319-01                            | COIL                                                                                                                                             | CHOKE 82UH R1217                                        | R1308            | 9-939-594-01<br>1-249-484-11       | R,METAL FILM<br>R,CARBON FILM            | 15K 1/6W 1%<br>6 8 1/2W 5                  |
|                                         |                                         | ****                                                                                                                                             |                                                         | R1310            | 1-249-484-11                       | R,CARBON FILM                            |                                            |
| L1803                                   | 9-939-319-01                            | COIL                                                                                                                                             | CHOKE 82UH R1217                                        | R1312            | 9-939-407-01                       | R,METAL FILM C                           |                                            |
| 7140                                    | Agente est of<br>Egent est of           | TRANSPORMER<br>FBIT                                                                                                                              | H-CRIVE EI-PUBLIA<br>FCK I-14856                        | R1313            | 9-939-407-01                       | R,METAL FILM (                           | OXIDE 560 1/2W 5                           |
| 12000                                   | 8,9-900-800-01                          | FB1                                                                                                                                              | PCK1/2156P*207Q.120403.40                               | R1315            | 1-260-099-11                       | R,CARBON FILM                            |                                            |
| 71931                                   | <u> </u>                                | TRANSFORME                                                                                                                                       | CMPS COIL ELECAND STR SCACE                             | R1320<br>R1323   | 1-247-848-11<br>9-910-999-31       | R,CARBON FILM<br>R,CARBON FILM           |                                            |
|                                         |                                         | <connec< td=""><td>CTOR&gt;</td><td>R1324</td><td>1-214-862-00</td><td>R,CARBON FILM</td><td>1 820K 1/2W 5</td></connec<>                        | CTOR>                                                   | R1324            | 1-214-862-00                       | R,CARBON FILM                            | 1 820K 1/2W 5                              |
| P1401A                                  | 9-939-325-01                            | CONNECTOR A                                                                                                                                      | SSY 10P (L=300) TO MA P1401B                            | (20V)            | 1-247-754-11                       | R,CARBON FILM                            | 1 5K 1/2W 5                                |
|                                         | \$9.93×327.00                           | CONDITIONER                                                                                                                                      | A SHORDER HER SUNGE IN 1801                             | R1325            | 1-260-072-11                       | R,CARBON FILM                            |                                            |
| P1803A<br>P1804                         | 9-939-328-01<br>9-939-403-01            |                                                                                                                                                  | SSY 12P(L=300) TO MA P1803B<br>SSY 1P 200MM TO MA P1101 | R1405<br>R1411   | 1-249-436-11<br>1-215-891-11       | R,CARBON FILM                            | M 39K 1/6W 5<br>OXIDE 680 2W 5%            |
| P1004                                   | 9-939-403-01                            |                                                                                                                                                  |                                                         | R1411            | 1-260-105-11                       | R,CARBON FILM                            |                                            |
|                                         |                                         | <transi< td=""><td>STOR&gt;</td><td>R1414</td><td>1-259-036-11</td><td>R,CARBON FILM</td><td></td></transi<>                                     | STOR>                                                   | R1414            | 1-259-036-11                       | R,CARBON FILM                            |                                            |
| Q1401                                   | 8-729-232-26                            | TRANSISTOR                                                                                                                                       | KTC1027-Y(KTC2235),KEC                                  | R1415            | 1-260-097-11                       | R,CARBON FILM                            | 4 680 1/2W 5                               |
| (20V)<br>Q1402                          | 9-936-295-01<br>9-939-593-01            | TRANSISTOR<br>TRANSISTOR                                                                                                                         | KTC3229(KTC2068),KEC<br>KTD2499                         | R1416            | 1-249-657-11                       | R.METAL FILM                             |                                            |
| (20V)                                   | 8-729-821-87                            | TRANSISTOR                                                                                                                                       | 2SD1878                                                 |                  | 1                                  | P.CARBONELLS<br>R.CARBONELLS             |                                            |
| Q1801                                   | 8-729-025-04                            | TRANSISTOR                                                                                                                                       | 2SC3852A SANKEN                                         | R1421            | 9-939-595-01                       | R,METAL FILM                             | 2 2K 1/2W 5                                |
| Q1802                                   | 8-729-206-81                            | TRANSISTOR                                                                                                                                       | KTA968A-Y KEC                                           | (20V)            | 1-249-377-11                       | R,METAL FILM                             | 0 68 1/2W 5                                |
| Q1803                                   | 8-719-803-82                            |                                                                                                                                                  | KTC3228-0 TP(KTC2383),KEC                               | R1426            | 1-249-413-11                       | R.CARBON FILM                            |                                            |
| Q1804                                   | 8-729-281-53                            |                                                                                                                                                  | KTC3198-TP-Y (KTC1815)KEC                               | 83427 0          | \$ 1 347 438 00<br>\$ 1 349 414 11 | жB<br>X                                  |                                            |
| Q1805<br>Q1806                          | 8-719-803-82<br>8-729-281-53            |                                                                                                                                                  | KTC3228-0 TP(KTC2383),KEC<br>KTC3198-TP-Y (KTC1815)KEC  | R1431            | 1-247-838-00                       | R.CARBON FILA                            |                                            |
| Q1000                                   | 0 727 201 33                            | THE INDICATION                                                                                                                                   | RICSISO II I (RICIOIS).                                 | R1800 A          | \$ 1207-695-00                     | ARW BUT G                                | 7W 10 FEXCEURLE SP1                        |
| Q1807                                   | 8-729-281-53                            |                                                                                                                                                  | KTC3198-TP-Y (KTC1815)KEC                               | R1803            | 1-215-875-11                       | R,METAL FILM                             | OXIDE 10K 1W 5%                            |
| Q1808<br>Q1809                          | 8-729-281-53<br>8-729-201-53            |                                                                                                                                                  | KTC3198-TP-Y (KTC1815)KEC<br>KTA1266-TP-Y (KTA1015) KEC | R1804            | 1-249-420-11                       | R,CARBON FILM                            | 1 8K 1/6W 5                                |
| Q1810                                   | 8-729-281-53                            |                                                                                                                                                  | KTC3198-TP-Y (KTC1815)KEC                               | R1805            | 1-249-417-11<br>9-939-336-01       | R,CARBON FILM<br>R.METAL FILM            | M 1 0K 1/6W 5<br>OXIDE 20 2W 5%            |
| Q1811                                   | 8-729-140-96                            | TRANSISTOR                                                                                                                                       | KTC3227-Y,TP(KTC1627A),KEC                              | R1808            | 9-908-989-01                       | R,PRW                                    | 2W 0 22 OHM J                              |
| Q1812                                   | 8-729-281-53                            | TRANSISTOR                                                                                                                                       | KTC3198-TP-Y (KTC1815)KEC                               | ;<br>;<br>;      | S common                           | RESISTOR                                 | Ek 23.4                                    |
| Q1813                                   | 8-729-281-53                            | TRANSISTOR                                                                                                                                       | KTC3198-TP-Y (KTC1815)KEC                               | R1811            | 1-249-421-11                       | R,METAL FILM                             | 2 2K 1/4W 2                                |
| 01884                                   |                                         |                                                                                                                                                  | KTA 102-0 TPO TC 900 KEC                                | R1812            | 1-215-857-11                       |                                          | OXIDE 10 1W 5%                             |
| Q1815                                   | 8-719-803-82                            | TRANSISTOR                                                                                                                                       | KTC3228-0 TP(KTC2383),KEC                               | R1813            | 1-215-902-11                       | K,WEIAL FILM                             | OXIDE 47K 1W 5%                            |
|                                         |                                         |                                                                                                                                                  |                                                         | •                |                                    |                                          |                                            |

| REF NO                                                                                                                                                         | PART NO                                                                                                                                                                                                                                                                                                                       | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | REMARK                                       | REF NO                                                                                                                                             | PART NO                                                                                                                                                                                                                                                                                                                                 | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | REMARK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| R1814                                                                                                                                                          | 1-260-099-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1 0K                                                                                                                                                                                                                | 1/2W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1907                                                                                                                                              | 1-249-419-11                                                                                                                                                                                                                                                                                                                            | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 5K 1/6W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| R1815                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                               | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | /2W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | R1907                                                                                                                                              | 1-247-754-11                                                                                                                                                                                                                                                                                                                            | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 5K 1/2W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1816                                                                                                                                                          | 1-249-437-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1909                                                                                                                                              | 1-247-754-11                                                                                                                                                                                                                                                                                                                            | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1 5K 1/2W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1817                                                                                                                                                          | 1-249-425-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1910                                                                                                                                              | 1-247-754-11                                                                                                                                                                                                                                                                                                                            | R,CARBON FILM .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 5K 1/2W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| R1818                                                                                                                                                          | 1-249-429-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1911                                                                                                                                              | 1-216-463-00                                                                                                                                                                                                                                                                                                                            | R,METAL FILM OXI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DE 12K 2W 5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1819                                                                                                                                                          | 1-259-454-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                         | D 145501 1 501 14 0 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DE 101/011/00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1820                                                                                                                                                          | 1-249-421-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2 2K                                                                                                                                                                                                                | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1912                                                                                                                                              | 1-216-463-00                                                                                                                                                                                                                                                                                                                            | R,METAL FILM OXI<br>R,METAL FILM OXI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1821                                                                                                                                                          | 1-249-422-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2.7K                                                                                                                                                                                                                | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1913                                                                                                                                              | 1-216-463-00<br>1-202-846-11                                                                                                                                                                                                                                                                                                            | R.CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 470K 1/2W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| R1822                                                                                                                                                          | 1-249-423-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1915                                                                                                                                              | 1-202-838-11                                                                                                                                                                                                                                                                                                                            | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 100K 1/2W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1823                                                                                                                                                          | 1-249-429-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10K                                                                                                                                                                                                                 | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1916                                                                                                                                              | 1-202-848-11                                                                                                                                                                                                                                                                                                                            | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 680K 1/2W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1824                                                                                                                                                          | 1-249-425-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | ]<br>                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1825                                                                                                                                                          | 1-249-425-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4 7K                                                                                                                                                                                                                | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | R1917                                                                                                                                              | 1-249-731-11                                                                                                                                                                                                                                                                                                                            | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 270K 1/2W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1826                                                                                                                                                          | 1-207-672-00                                                                                                                                                                                                                                                                                                                  | R,RW RECT G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5W 2 2 I                                                                                                                                                                                                            | DOUBLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 7                                            | R1918                                                                                                                                              | 1-214-921-00<br>1-249-405-11                                                                                                                                                                                                                                                                                                            | R,CARBON FILM<br>R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 220K 1/2W<br>100 1/6W :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1829                                                                                                                                                          | 1-249-427-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2                                            |                                                                                                                                                    | 1-241-760-11                                                                                                                                                                                                                                                                                                                            | R,HORI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RH0638CN2R0PB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1830                                                                                                                                                          | 1-249-429-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                                                                                                                    | 1-241-760-11                                                                                                                                                                                                                                                                                                                            | R,HORI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RH0638CN2R0PB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1831                                                                                                                                                          | 1-249-429-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | į                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1832                                                                                                                                                          | 9-939-412-01                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1 6K 1                                                                                                                                                                                                              | 1/2W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                                                                                                                    | 1-241-763-11                                                                                                                                                                                                                                                                                                                            | R,HORI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RH0638CS3R2HB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| D.1000                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                               | D. G. DDON EWAY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 4 777                                                                                                                                                                                                               | 146137 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                              |                                                                                                                                                    | 1-241-763-11                                                                                                                                                                                                                                                                                                                            | R,HORI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RH0638CS3R2HB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1833                                                                                                                                                          | 1-249-425-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM<br>R.CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                                                                                                                    | 1-241-763-11<br>1-230-641-11                                                                                                                                                                                                                                                                                                            | R,HORI<br>R,HORI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RH0638CS3R2HB<br>RH092GDJ6J1AA(                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1834<br>R1835                                                                                                                                                 | 1-249-425-11<br>1-249-432-11                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5<br>1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                              |                                                                                                                                                    | 1-230-641-11                                                                                                                                                                                                                                                                                                                            | R,HORI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | RH092GDJ6J1AA(                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1836                                                                                                                                                          | 1-249-433-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1837                                                                                                                                                          | 1-260-111-00                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/2W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                         | 0 020 264 01 DD MOU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TO COMPLETE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                              | 1                                                                                                                                                  | *                                                                                                                                                                                                                                                                                                                                       | 9-939-364-01 RP MOU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | NI COMPLETE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1838                                                                                                                                                          | 9-910-999-31                                                                                                                                                                                                                                                                                                                  | R.CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | /2W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | <br>                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                         | *****                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                                | 2 9 939 396 88                                                                                                                                                                                                                                                                                                                | R CARBON COMMOS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                              | 1                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                         | <capacito< td=""><td>R&gt;</td><td></td></capacito<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | R>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1840<br>R1843                                                                                                                                                 | 9-939-412-01<br>1-259-454-11                                                                                                                                                                                                                                                                                                  | R,CARBON FILM<br>R.CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                     | 1/2W 5<br>1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                              | 1                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                         | CAIACH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1844                                                                                                                                                          | 1-249-406-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | C701                                                                                                                                               | 1-124-455-00                                                                                                                                                                                                                                                                                                                            | C,ELECTROLYTIC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 100UF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 1010-1-1                                                                                                                                                       | 1-217-400 11                                                                                                                                                                                                                                                                                                                  | R,C/HDO//12/1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 120                                                                                                                                                                                                                 | 11011                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C702                                                                                                                                               | 9-939-289-01                                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | IELE) 0 1M 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50V Z                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| R1845                                                                                                                                                          | 1-249-429-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10K                                                                                                                                                                                                                 | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | C703                                                                                                                                               | 1-162-306-11                                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1846                                                                                                                                                          | 1-249-429-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | C704                                                                                                                                               | 1-126-301-11                                                                                                                                                                                                                                                                                                                            | C,ELECTROLYTIC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1UF 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| R1849                                                                                                                                                          | 1-259-418-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                     | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | C705                                                                                                                                               | 1-162-306-11                                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (ELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| R1850                                                                                                                                                          | 1-259-418-11                                                                                                                                                                                                                                                                                                                  | R,CARBON FILM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 390                                                                                                                                                                                                                 | 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                              | C709                                                                                                                                               | 1-162-306-11                                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                               | <miscellane< td=""><td>OUS&gt;</td><td></td><td></td><td>C710</td><td>1-162-306-11</td><td>C,TUBULA(HIGH D</td><td></td><td>16V M</td></miscellane<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | OUS>                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                              | C710                                                                                                                                               | 1-162-306-11                                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                              |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 03371201                                                                                                                                                       | 0.000.001.01                                                                                                                                                                                                                                                                                                                  | OUTPOU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CIVO DIOT                                                                                                                                                                                                           | 20.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                              | C711                                                                                                                                               | 1-162-306-11                                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                                                                                                                | 9-908-991-01                                                                                                                                                                                                                                                                                                                  | SWITCH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SVC P12T                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | × *****                                      | C712                                                                                                                                               | 1-162-306-11                                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | IELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 73818801                                                                                                                                                       | \$ 9-909-880-01                                                                                                                                                                                                                                                                                                               | THERMSTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PTH45114                                                                                                                                                                                                            | 808G38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ) M144)                                      |                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | IELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 73818801                                                                                                                                                       | \$ 9-909-880-01                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | PTH45114                                                                                                                                                                                                            | 808G38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | () 34144)<br>                                | C712<br>C713                                                                                                                                       | 1-162-306-11<br>1-162-306-11                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D<br>C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (ELE) 001MF<br>(ELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 73818801                                                                                                                                                       | <b> </b>                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9714614<br>340 948<br>                                                                                                                                                                                              | 1448G 114<br>1-144<br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ) MI44)                                      | C712                                                                                                                                               | 1-162-306-11                                                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (ELE) 0 01MF<br>(ELE) 0 01MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 73818801                                                                                                                                                       | * 9-93                                                                                                                                                                                                                                                                                                                        | 9-461-01 C MOUNT CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | MPLETE (13V                                                                                                                                                                                                         | 9 14 4<br><br>/)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ) #1 <b>44</b>                               | C712<br>C713<br>C714<br>C717<br>C718                                                                                                               | 1-162-306-11<br>1-162-306-11<br>1-162-306-11                                                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ELE) 0 01MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16V M<br>16V M<br>16V M<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 73818801                                                                                                                                                       | * 9-93                                                                                                                                                                                                                                                                                                                        | 9-461-01 C MOUNT CO<br>9-358-01 C MOUNT CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MPLETE (20V                                                                                                                                                                                                         | 9 14 4<br><br>/)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | () \$61.44)<br>                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719                                                                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11                                                                                                                                                                                                                                            | C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 73818801                                                                                                                                                       | * 9-93                                                                                                                                                                                                                                                                                                                        | 9-461-01 C MOUNT CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | MPLETE (20V                                                                                                                                                                                                         | 9 14 4<br><br>/)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ) <b>841-43</b>                              | C712<br>C713<br>C714<br>C717<br>C718                                                                                                               | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11                                                                                                                                                                                                                                                            | C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 16V M<br>16V M<br>16V M<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 73818801                                                                                                                                                       | * 9-93                                                                                                                                                                                                                                                                                                                        | 9-461-01 C MOUNT CO<br>9-358-01 C MOUNT CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MPLETE (20V                                                                                                                                                                                                         | 9 14 4<br><br>/)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720                                                                                               | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11                                                                                                                                                                                                                                            | C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | IELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 73818801                                                                                                                                                       | * 9-93                                                                                                                                                                                                                                                                                                                        | 9-461-01 C MOUNT CO<br>9-358-01 C MOUNT CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MPLETE (20V                                                                                                                                                                                                         | 9 14 4<br><br>/)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0 <b>14 (44)</b>                             | C712<br>C713<br>C714<br>C717<br>C718<br>C719                                                                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11                                                                                                                                                                                                                                            | C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D<br>C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | IELE) 001MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                | * 9-93                                                                                                                                                                                                                                                                                                                        | 9-461-01 C MOUNT CO<br>9-358-01 C MOUNT CO<br>::::::::                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MPLETE (13V<br>MPLETE (20V<br>:::::                                                                                                                                                                                 | ***<br><br>V)<br>V)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720                                                                                               | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-600-11<br>1-162-217-31                                                                                                                                                                                                            | C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | IELE) 001MF IELE) 4700PF 569 50V 47PF 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 73818801                                                                                                                                                       | * 9-93                                                                                                                                                                                                                                                                                                                        | 9-461-01 C MOUNT CO<br>9-358-01 C MOUNT CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MPLETE (13V MPLETE (20V :::::  R> ELE) 680P                                                                                                                                                                         | ***<br><br>V)<br>V)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C720<br>C723<br>C731<br>C732<br>C733                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-600-11<br>1-162-217-31<br>1-162-218-31                                                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(T C) C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | IELE) 001MF IELE) 4700PF 56P 50V 47PF 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| C1901                                                                                                                                                          | * 9-93'<br>9-93'<br>1-162-292-31                                                                                                                                                                                                                                                                                              | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO  CAPACITO  C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | MPLETE (13V<br>MPLETE (20V<br>:::::<br>R><br>ELE) 680P<br>ELE) 680P<br>ELE) 680P                                                                                                                                    | 9 50V K<br>9 50V K<br>9 50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C720                                                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-600-11<br>1-162-217-31<br>1-162-215-31                                                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | IELE) 001MF IELE) 4700PF 56P 50V 47PF 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| C1901<br>C1902<br>C1903<br>C1904                                                                                                                               | * 9-93<br>* 9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11                                                                                                                                                                                                                                                      | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO  C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | MPLETE (13V<br>MPLETE (20V<br>::::::::::::::::::::::::::::::::::::                                                                                                                                                  | 9 50V K<br>5 50V K<br>5 50V K<br>630V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734                                               | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-284-31                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CELE   0 01MF   0 0   | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V J<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| C1901<br>C1902<br>C1903                                                                                                                                        | * 9-93<br>9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31                                                                                                                                                                                                                                                        | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO  CAPACITO  C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | MPLETE (13V<br>MPLETE (20V<br>::::::::::::::::::::::::::::::::::::                                                                                                                                                  | 9 50V K<br>9 50V K<br>9 50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C720<br>C723<br>C731<br>C732<br>C733                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-600-11<br>1-162-217-31<br>1-162-218-31                                                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(TC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V J<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| C1901<br>C1902<br>C1903<br>C1904                                                                                                                               | * 9-93<br>* 9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11                                                                                                                                                                                                                                                      | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO  C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | MPLETE (13V<br>MPLETE (20V<br>::::::<br>R><br>ELE) 680P<br>ELE) 680P<br>ELE) 680P<br>0 01<br>2200                                                                                                                   | 9 50V K<br>5 50V K<br>5 50V K<br>630V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-218-31<br>1-162-219-31                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(T C) C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)                                                                                                                      | * 9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01                                                                                                                                                                                                                                | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | MPLETE (13V<br>MPLETE (20V<br>::::::<br>R><br>ELLE) 680P<br>ELLE) 680P<br>ELLE) 680P<br>0 01<br>2200                                                                                                                | 9 50V K<br>5 50V K<br>5 50V K<br>630V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-218-31<br>1-162-219-31                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(TC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)                                                                                                                      | *9-93<br>*9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85                                                                                                                                                                                                        | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)    CDIODE  DIODE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | MPLETE (13V<br>MPLETE (20V<br>::::::<br>R><br>ELE) 680P<br>ELE) 680P<br>ELE) 680P<br>0 01<br>2200                                                                                                                   | 9 50V K<br>5 50V K<br>5 50V K<br>630V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-218-31<br>1-162-219-31                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(T C) C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)                                                                                                                      | * 9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01                                                                                                                                                                                                                                | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | MPLETE (13V<br>MPLETE (20V<br>::::::<br>R><br>ELLE) 680P<br>ELLE) 680P<br>ELLE) 680P<br>0 01<br>2200                                                                                                                | 9 50V K<br>5 50V K<br>5 50V K<br>630V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-284-31<br>1-162-306-11                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 68P 50 IELE) 0 01MF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)                                                                                                                      | *9-93'<br>9-93'<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85                                                                                                                                                                                               | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)   CDIODE DIODE DIODE DIODE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MPLETE (13V<br>MPLETE (20V<br>************************************                                                                                                                                                  | 9 50V K<br>5 50V K<br>5 50V K<br>630V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734                                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-284-31<br>1-162-306-11                                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | IELE) 0 01MF IELE) 1 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 68P 50 IELE) 0 01MF IELE) 150P 5 IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)                                                                                                                      | *9-93'<br>9-93'<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85                                                                                                                                                                                               | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K) DIODE DIODE DIODE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | MPLETE (13V<br>MPLETE (20V<br>************************************                                                                                                                                                  | 9 50V K<br>5 50V K<br>5 50V K<br>630V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734<br>C735<br>C736                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-217-31<br>1-162-288-31<br>1-162-284-31<br>1-162-306-11<br>1-810-534-11                                                                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC) C,TUBULA(HIGH D C,TU | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF  LA7416 30SD 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)                                                                                                                      | *9-93'<br>9-93'<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85                                                                                                                                                                                               | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)   CDIODE DIODE DIODE DIODE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MPLETE (13V<br>MPLETE (20V<br>*******  R>  ELE) 680P<br>ELE) 680P<br>0 01<br>2200  1\$2471<br>1\$2471<br>1\$2471                                                                                                    | 9 50V K<br>5 50V K<br>5 50V K<br>630V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734<br>C735<br>C736                               | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-284-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-508-11                                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC) C,TUBULA(HIGH D C,TU | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5ELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 4700PF 58P 50V 18P 58P 50V IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909                                                                                           | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85                                                                                                                                                                                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,POLY PROPYLNE C,CERAMIC(HI-K)    CDIODE  DIODE  DIODE  DIODE  CONNECTO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MPLETE (13V<br>MPLETE (20V<br>************************************                                                                                                                                                  | > 50V K<br>> 50V K<br>> 50V K<br>> 50V K<br>630V<br>PF 2KV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                              | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734<br>C735<br>C736                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-288-31<br>1-162-288-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-513-11                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 4700PF IELE) 150P 5 IELE) 150P 5 IELE) 150P 5 IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909                                                                                           | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01                                                                                                                                                                                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,POLY PROPYLNE C,CERAMIC(HI-K)    CDIODE DIODE DIODE DIODE CONNECTO CONNECTOR ASSY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | MPLETE (13V<br>MPLETE (20V<br>::::::  R>  ELE) 680P ELE) 680P 0 01 2200  1\$2471 1\$2471 1\$2471 1\$2471 1\$7 (L                                                                                                    | > 50V K<br>> 50V K<br>> 50V K<br>> 50V K<br>630V<br>PF 2KV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 501-A                                        | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734<br>C735<br>C736                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-288-31<br>1-162-288-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-513-11<br>1-410-520-11                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC) C,TUBULA(HIGH D C,TU | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5ELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 4700PF 58P 50V 18P 58P 50V IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909                                                                                           | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-939-402-01                                                                                                                                                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MPLETE (13V<br>MPLETE (20V<br>************************************                                                                                                                                                  | 50V K<br>50V K<br>50V K<br>630V<br>PF 2KV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 501-A<br>O D P1504-A                         | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734<br>C735<br>C736                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-288-31<br>1-162-288-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-513-11                                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 68P 50 IELE) 0 01MF IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909                                                                                           | *9-93<br>*9-93<br>*9-93<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-939-402-01<br>9-936-295-01                                                                                                                       | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TOBULA(HIGH DI C,TUBULA(HIGH | MPLETE (13V<br>MPLETE (20V<br>::::::<br>R>  ELE) 680P<br>ELE) 680P<br>0 01<br>2200  1\$2471<br>1\$2471<br>1\$2471<br>1\$2471  OR>  8P T<br>4P (L                                                                    | 9 50V K<br>5 50V K<br>5 50V K<br>6 50V K<br>6 30V<br>10 MA P1<br>10 MA P1<br>10 M2 P1<br>10 | 501-A<br>D D P1504-A                         | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734<br>C735<br>C736                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-288-31<br>1-162-288-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-513-11<br>1-410-520-11                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 68P 50 IELE) 0 01MF IELE) 150P 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909<br>P1501<br>P1504                                                                         | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-936-295-01<br>9-936-295-01                                                                                                                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MPLETE (13V<br>MPLETE (20V<br>******  R>  ELE) 680P ELE) 680P ELE) 680P 152471 152471 152471 152471 OR>  8P T 4P (L  OR>                                                                                            | > 50V K<br>> 50V K<br>= 250V TO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 501-A<br>O D P1504-A                         | C712<br>C713<br>C714<br>C717<br>C718<br>C719<br>C720<br>C723<br>C731<br>C732<br>C733<br>C734<br>C735<br>C736                                       | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-215-31<br>1-162-215-31<br>1-162-288-31<br>1-162-284-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-521-11<br>1-410-520-11<br>9-939-322-01                                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC) C,TUBULA(HIGH D C,TU | IELE) 0 01MF IELE) 330P 5 IELE) 150P 5 IELE) 68P 50 IELE) 0 01MF  LA7416 30SD 4  R>  100UH K 8 2UH K 22UH K 82UH K 270UH K 87                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V J<br>50V K<br>50V J<br>16V M<br>HD AMP(VCR)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909<br>P1501<br>P1504                                                                         | *9-93<br>*9-93<br>*9-93<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-939-402-01<br>9-936-295-01                                                                                                                       | P-461-01 C MOUNT CO P-358-01 C MOUNT CO P-358-01 C MOUNT CO C,TUBULA(HIGH DE C,TUBULA(HIGH | MPLETE (13V<br>MPLETE (20V<br>************************************                                                                                                                                                  | 9 50V K<br>5 50V K<br>5 50V K<br>6 50V K<br>6 30V<br>10 MA P1<br>10 MA P1<br>10 M2 P1<br>10 | 501-A<br>O D P1504-A                         | C712 C713  C714 C717 C718 C719 C720  C723 C731 C732 C733 C734  C735 C736  L731 L731 L731 L732 L733 L734  R701 R703                                 | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-284-31<br>1-162-284-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-508-11<br>1-410-520-11<br>9-939-322-01                                                            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(TC) | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 68P 50 IELE) 150P 5 IEL | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V K<br>50V K<br>50V K<br>50V M<br>HD AMP(VCR)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909<br>P1501<br>P1504                                                                         | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-936-295-01<br>9-936-295-01                                                                                                                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MPLETE (13V<br>MPLETE (20V<br>************************************                                                                                                                                                  | > 50V K<br>> 50V K<br>= 250V TO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 501-A<br>O D P1504-A                         | C712 C713  C714 C717 C718 C719 C720  C723 C731 C732 C733 C734  C735 C736  IC701  L701  L701  L701  L701  L701  R701  R703 R704                     | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-288-31<br>1-162-284-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-513-11<br>1-410-520-11<br>9-939-322-01<br>9-939-413-01<br>1-249-433-11<br>1-249-433-11            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC)  | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 68P 50 IELE) 0 01MF IELE) 830P 5 IELE) 150P 5 IELE) 150P 5 IELE) 150P 5 IELE) 75M 16W 20H K 22UH K 22UH K 22UH K 22UH K 270UH K R> 75K 1/6W 20K 1/6W 20K 1/6W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V J<br>50V K<br>50V K<br>50V M<br>HD AMP(VCR)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909<br>P1501<br>P1504<br>Q1901<br>Q1902<br>Q1903                                              | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-936-295-01<br>9-936-295-01<br>9-936-295-01                                                                                                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MPLETE (13V<br>MPLETE (20V<br>*******  R>  ELE) 680P ELE) 680P 0 01 2200  1\$2471 1\$2471 1\$2471 1\$2471  DR>  8P T 4P (L  OR>  KTC322 KTC322 KTC322 KTC322                                                        | 5 50V K 5 50V K 5 50V K 6 50V K 6 50V K 6 50V K 7 50V                                                                                                                                                                                                                                                                                                                                                                                                                           | 501-A<br>O D P1504-A                         | C712 C713  C714 C717 C718 C719 C720  C723 C731 C732 C731 C732 C735 C736  L736  L731 L731 L731 L732 L733 L734  R701 R703 R704 R723                  | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-215-31<br>1-162-284-31<br>1-162-284-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-513-11<br>1-410-520-11<br>9-939-322-01<br>9-939-413-01<br>1-249-433-11<br>1-249-435-11            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC)  | IELE) 0 01MF IELE) 1 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 68P 50 IELE) 0 01MF IELE) 750P 5 IELE) 150P 5 I | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K<br>6V J<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909<br>P1501<br>P1504<br>Q1901<br>Q1902<br>Q1903                                              | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-936-295-01<br>9-936-295-01<br>9-936-295-01<br>1-249-404-11                                                                                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MPLETE (13V<br>MPLETE (20V<br>************************************                                                                                                                                                  | > 50V K<br>> 50V K<br>= 250V TO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 501-A<br>O D P1504-A                         | C712 C713  C714 C717 C718 C719 C720  C723 C731 C732 C733 C734  C735 C736  IC701  L701  L701  L701  L701  L701  R701  R703 R704                     | 1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-306-11<br>1-162-217-31<br>1-162-215-31<br>1-162-288-31<br>1-162-288-31<br>1-162-284-31<br>1-162-306-11<br>1-810-534-11<br>1-410-521-11<br>1-410-513-11<br>1-410-520-11<br>9-939-322-01<br>9-939-413-01<br>1-249-433-11<br>1-249-433-11            | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC)  | IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 68P 50 IELE) 0 01MF IELE) 830P 5 IELE) 150P 5 IELE) 150P 5 IELE) 150P 5 IELE) 75M 16W 20H K 22UH K 22UH K 22UH K 22UH K 270UH K R> 75K 1/6W 20K 1/6W 20K 1/6W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K<br>6V J<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909<br>P1501<br>P1504<br>Q1901<br>Q1902<br>Q1903                                              | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-936-295-01<br>9-936-295-01<br>9-936-295-01                                                                                                 | P-461-01 C MOUNT CO P-358-01 C MOUNT CO P-358-01 C MOUNT CO C,TUBULA(HIGH DE C,TUBULA(HIGH | MPLETE (13V<br>MPLETE (20V<br>************************************                                                                                                                                                  | 2 50V K<br>5 50V K<br>5 50V K<br>6 50V K<br>6 30V<br>9PF 2KV<br>10 MA P1<br>1 = 250) TC<br>1 = 250) TC<br>1 = 250 (KTC2)<br>1 = 16W 5<br>1 = 16W 5<br>1 = 16W 5<br>1 = 16W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 501-A<br>O D P1504-A                         | C712 C713  C714 C717 C718 C719 C720  C723 C731 C732 C731 C732 C735 C736  L736  L731 L731 L731 L732 L733 L734  R701 R703 R704 R723                  | 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-217-31 1-162-215-31 1-162-288-31 1-162-284-31 1-162-284-31 1-162-306-11  1-810-534-11  1-410-521-11 1-410-508-11 1-410-513-11 1-410-520-11 9-939-322-01  9-939-413-01 1-249-433-11 1-249-433-11 1-249-431-11 1-249-413-11 1-249-414-11 | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) | IELE) 0 01MF IELE) 1 0 01MF IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 51ELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 4700PF 58P 50V 47PF 58 | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7 J<br>50V K<br>50V K<br>50V K<br>50V K<br>50V K<br>50V K<br>50V K<br>50V K<br>50V A<br>50V |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909<br>P1501<br>P1504<br>Q1901<br>Q1902<br>Q1903<br>R1901<br>R1902<br>R1903<br>R1904          | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-936-295-01<br>9-936-295-01<br>9-936-295-01<br>1-249-404-11<br>1-247-812-11<br>1-247-812-11<br>1-247-812-11                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MPLETE (13V<br>MPLETE (20V<br>:::::  R>  ELE) 680P ELE) 680P 0 01 2200   1\$2471 1\$2471 1\$2471 1\$2471  OR>  ## (L  OR)  KTC322 KTC322 KTC322  KTC322  KTC322  KTC322  KTC322  KTC322  KTC326  82 160 160 160 160 | 50 KP 50V KP 50V KP 50V KF 630V NPF 2KV PF 2                                                                                                                                                                                                                                                                                                                                                                                                                          | 501-A<br>D D P1504-A<br>068),KEC<br>068),KEC | C712 C713  C714 C717 C718 C719 C720  C723 C731 C732 C733 C734  C735 C736  L701  L701  L701  L701  L701  L701  R701  R703 R704 R723 R731  R732 R733 | 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-217-31 1-162-215-31 1-162-288-31 1-162-288-31 1-162-284-31 1-162-306-11  1-810-534-11  1-810-534-11 1-410-513-11 1-410-520-11 9-939-322-01  9-939-413-01 1-249-433-11 1-249-433-11 1-249-431-11 1-249-413-11 1-249-413-11              | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) C,T | IELE) 0 01MF IELE) 1 0 01MF IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 150P 5 IELE) 150P 5 IELE) 68P 50 IELE) 0 01MF IELE) 75MF IELE) 150P 5 I | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V K<br>50V K<br>0V J<br>16V M<br>HD AMP(VCR)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)<br>D1907<br>D1908<br>D1909<br>P1501<br>P1504<br>Q1901<br>Q1902<br>Q1903<br>R1901<br>R1902<br>R1903<br>R1904<br>R1905 | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-936-295-01<br>9-936-295-01<br>9-936-295-01<br>1-249-404-11<br>1-247-812-11<br>1-247-812-11<br>1-247-812-11<br>1-249-419-11 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,TUBULA(HIGH DE C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MPLETE (13V<br>MPLETE (20V<br>******  R>  ELE) 680P                                                                                                                                                                 | 2 50V K 5 50V K 6 50V K 6 50V K 6 50V K 6 630V PF 2KV  TO MA PI =250) TO 29 (KTC20 29 (KTC20 1/6W 5 1/6W 5 1/6W 5 1/6W 5 1/6W 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 501-A<br>D D P1504-A<br>068),KEC<br>068),KEC | C712 C713  C714 C717 C718 C719 C720  C723 C731 C732 C733 C734  C735 C736  L731 L731 L732 L733 L734  R701 R703 R704 R723 R731 R732 R733 R734        | 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-217-31 1-162-215-31 1-162-288-31 1-162-288-31 1-162-284-31 1-162-306-11  1-810-534-11  1-410-521-11 1-410-508-11 1-410-513-11 1-410-520-11 9-939-322-01  9-939-413-01 1-249-433-11 1-249-433-11 1-249-431-11 1-249-413-11 1-249-419-11 | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC)  | IELE) 0 01MF IELE) 1 0 01MF IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 4700PF IELE) 330P 5 IELE) 150P 5 I | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K<br>60V K<br>60V K<br>60V M<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C1901<br>C1902<br>C1903<br>C1904<br>(20V)  D1907<br>D1908<br>D1909  P1501<br>P1504  Q1901<br>Q1902<br>Q1903  R1901<br>R1902<br>R1903<br>R1904                  | *9-93<br>9-93<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-162-292-31<br>1-136-203-11<br>9-904-475-01<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>8-719-815-85<br>9-939-326-01<br>9-936-295-01<br>9-936-295-01<br>9-936-295-01<br>1-249-404-11<br>1-247-812-11<br>1-247-812-11<br>1-247-812-11                 | 9-461-01 C MOUNT CO 9-358-01 C MOUNT CO 9-358-01 C MOUNT CO C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,TUBULA(HIGH DI C,POLY PROPYLNE C,CERAMIC(HI-K)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MPLETE (13V<br>MPLETE (20V<br>******  R>  ELE) 680P                                                                                                                                                                 | 50 KP 50V KP 50V KP 50V KF 630V NPF 2KV PF 2                                                                                                                                                                                                                                                                                                                                                                                                                          | 501-A<br>D D P1504-A<br>068),KEC<br>068),KEC | C712 C713  C714 C717 C718 C719 C720  C723 C731 C732 C733 C734  C735 C736  L701  L701  L701  L701  L701  L701  R701  R703 R704 R723 R731  R732 R733 | 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-306-11 1-162-217-31 1-162-215-31 1-162-288-31 1-162-288-31 1-162-284-31 1-162-306-11  1-810-534-11  1-810-534-11 1-410-513-11 1-410-520-11 9-939-322-01  9-939-413-01 1-249-433-11 1-249-433-11 1-249-431-11 1-249-413-11 1-249-413-11              | C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) C,TUBULA(HIGH D C,TUBULA(TC) C,T | IELE) 0 01MF IELE) 1 0 01MF IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 0 01MF IELE) 4700PF 56P 50V 47PF 5 IELE) 330P 5 IELE) 150P 5 IELE) 150P 5 IELE) 150P 5 IELE) 68P 50 IELE) 0 01MF IELE) 75MF IELE) 150P 5 I | 16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V M<br>16V X<br>7J<br>50V J<br>50V K<br>50V K<br>60V K<br>60V K<br>60V M<br>16V M<br>16V M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

REMARK

| REF NO     | PART NO                      | DESCRIPTION                                                                                       |                                  | REMARK | REF NO      | PART NO | DESCRIPTION |
|------------|------------------------------|---------------------------------------------------------------------------------------------------|----------------------------------|--------|-------------|---------|-------------|
|            | *                            | 9-939-365-01 MF LEFT                                                                              | MOUNT COMPLETE                   |        | !<br>!      |         |             |
|            |                              |                                                                                                   | !<br>!                           |        |             |         |             |
|            |                              | <capacito< th=""><th>!<br/>!</th><th></th><th></th></capacito<>                                   | !<br>!                           |        |             |         |             |
| C01        | 1-126-786-11                 | C,ELECTROLYTIC                                                                                    | 47UF 16V M                       |        | 1           |         |             |
|            |                              | <led></led>                                                                                       | !<br>[                           |        |             |         |             |
| D01        | 9-939-397-01                 | DIODE,LED                                                                                         | DL-11S2RN1 OPI                   |        | <br>        |         |             |
| D02<br>D03 | 9-939-397-01<br>9-939-397-01 | DIODE,LED<br>DIODE,LED                                                                            | DL-11S2RN1 OPT<br>DL-11S2RN1 OPT |        | i           |         |             |
|            |                              | <pre-amp< td=""><td><b>'</b>&gt;</td><td></td><td>;<br/>!<br/>!</td><td></td><td></td></pre-amp<> | <b>'</b> >                       |        | ;<br>!<br>! |         |             |
| RC01       | 9-939-332-01                 | PRE-AMP                                                                                           | ORC-40S                          |        | !<br>!      |         |             |
|            |                              | <resistor< td=""><td><b>?&gt;</b></td><td></td><td> <br/> </td><td></td><td></td></resistor<>     | <b>?&gt;</b>                     |        | <br>        |         |             |
| R85        | 1-249-423-11                 | R,CARBON FILM                                                                                     | 3 3K 1/6W                        | 5      | 1           |         |             |
| R86        | 1-249-420-11                 | R,CARBON FILM                                                                                     | 1 8K 1/6W                        |        | !           |         |             |
| R87        | 1-249-427-11                 | R,CARBON FILM                                                                                     | 6 8K 1/6W                        |        | į           |         |             |
| R88        | 1-249-432-11                 | R,CARBON FILM                                                                                     | 18K 1/6W 5                       | 1      | 1           |         |             |
|            |                              | <switch:< th=""><th></th><th></th><th></th><th></th><th></th></switch:<>                          |                                  |        |             |         |             |
| SW6        | 1-572-200-11                 | SWITCH                                                                                            | TACT 2LEAD HOR                   |        | i           |         |             |
| SW7<br>SW8 | 1-572-200-11<br>1-572-200-11 | SWITCH<br>SWITCH                                                                                  | TACT 2LEAD HOR<br>TACT 2LEAD HOR |        | 1           |         |             |
| SW9        | 1-572-200-11                 | SWITCH                                                                                            | TACT 2LEAD HOR                   |        | <br>        |         |             |
| SW10       | 1-572-200-11                 | SWITCH                                                                                            | TACT 2LEAD HOR                   |        |             |         |             |
|            |                              | * 9-939-367-01 MF RIGH                                                                            | T MOUNT COMPLET                  | 'E.    | 4<br>!<br>! |         |             |
|            |                              |                                                                                                   |                                  |        | <br>        |         |             |
|            |                              | <resistoi< th=""><th>R&gt;</th><th></th><th>1</th><th></th><th></th></resistoi<>                  | R>                               |        | 1           |         |             |
| R81        | 1-249-418-11                 | R,CARBON FILM                                                                                     | 1 2K 1/6W                        | 5      |             |         |             |
| R82        | 1-249-420-11                 | R,CARBON FILM                                                                                     | 1 8K 1/6W                        |        | 1           |         |             |
| R83        | 1-249-423-11                 | R,CARBON FILM                                                                                     | 3 3K 1/6W                        | 5      | 1           |         |             |
| R84        | 1-249-427-11                 | R,CARBON FILM                                                                                     | 6 8K 1/6W                        | 5      |             |         |             |
|            |                              | <switch< th=""><th>&gt;</th><th></th><th></th><th></th><th></th></switch<>                        | >                                |        |             |         |             |
| SW1        | 1-572-200-11                 | SWITCH                                                                                            | TACT 2LEAD HOR                   | I.     | İ           |         |             |
| SW2        | 1-572-200-11                 | SWITCH                                                                                            | TACT 2LEAD HOR                   |        | 1           |         |             |
| SW3        | 1-572-200-11                 | SWITCH<br>SWITCH                                                                                  | TACT 2LEAD HOR<br>TACT 2LEAD HOR |        |             |         |             |
| SW4<br>SW5 | 1-572-200-11<br>1-572-200-11 | SWITCH                                                                                            | TACT 2LEAD HOR                   |        | -           |         |             |
|            |                              |                                                                                                   |                                  |        |             |         |             |
|            |                              | <accessor< td=""><td> <br/> </td><td></td><td></td></accessor<>                                   | <br>                             |        |             |         |             |
| A1         | 9-939-214-01                 | INSTUCTION MANU                                                                                   | JAL (ENG/SPA)                    |        | !           |         |             |
| Al         | 9-939-215-01                 | INSTUCTION MANU                                                                                   | ,                                |        |             |         |             |
| A2         | 1-473-626-11                 | REMOTE CONTROL                                                                                    |                                  |        |             |         |             |
| A2<br>A3   | 1-473-626-21<br>9-908-072-01 | REMOTE CONTROL<br>ADAPTER, ANT                                                                    | LEK(KM-Y138W)                    |        | i           |         |             |
| AS         | 7-700-07 <i>2-</i> 01        | ADALIER,ANI                                                                                       |                                  |        | 1           |         |             |